evropský sociální fond v ČR
EVROPSKÁ UNIE
MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY
OP Vzdělávání pro konkurenceschopnost
INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Název projektu: **Zkvalitnění výuky ve vztahu k odborné praxi na zemědělské škole v Táboře**

Číslo projektu: **CZ.1.07/1.1.14/02.0051**

Vyšší odborná škola a Střední zemědělská škola v Táboře

Učební texty a konverzační témata z předmětu

Anglický jazyk

Tábor, 2014

Obsah

Název tematického celku: Život na rodinné zemědělské farmě.
Life on the family farm.

Anotace:
Materiál popisuje jednotlivé části zemědělské farmy v anglickém jazyce, seznamuje s prací farmáře s hospodářskými zvířaty a na poli.

Klíčová slova:
Farmhouse, cowshed, barn, silo, field, meadow, plough, plant, harvest, fertilize.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o životě na rodinné zemědělské farmě.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat části farmy, činnosti na farmě a hospodářská zvířata,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na dané téma,
5) dokáže informovat o životě na farmě.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Voráček, Jaroslav. *Zemědělská angličtina.* 1. vydání Praha: Profi Press, 2004. ISBN 80-86726-08-8.

A day on a family farm

Altough farmers have a lot of mechanization nowadays, they have a lot to do. They have to work in the stables, in the fields and they mend the machines. Certainly many things depend on the weather. In spring and in summer, in the time of harvest, there is particulary a lot of work.

But how does a normal weekday on a farm look like?

5:30 - The alrm clock rings and the farmer has to get up.

6:00 - 8:00 - The farmwife has to milk the dairy cows in the milking parlour. In the milking parlour, there are milking stands according to the type of the milking parlour. Dairy cows are milked two times a day manually or by milking maschine. After milking both milking parlour and milking mashine have to be washed closely and dairy cows are fed. The farmer uses a tractor with food trolley to feed the cows or he distributes the feeding with a fork. A dairy cow give us about 30 litres of milk a day. An annual milk yield is about 6000 or 7000 litres.

8:15 - 9:00 - The farmwife feeds the young calves in calf nursery with milk.

9:00 - 12:00 - The farmer prepares the machines for operations in the field. According to the season there are different things to do, for example to plough, fertilize, sow, harvest or to make the haylage. The meadows must be mowed, the hay must be done. The farmer uses a lot of machines, for example: combine harvester, plough, cultivator, sprayer, baler binder, potato combine etc.

12:00 - Before lunch a tanker from the dairy comes to pick up the milk from the farm. The milk is cooled all the time. In the dairy first the quality of the milk is checked and later the milk is pasteurized. In this proces all sorts of bacteria die.

12:00 - 13:00 - Lunchtime

13:00 - 16:30 - In this time all animals on the farm are controlled (fodder and feeds) and all of the operations in the fields go on. Mail and office work must be also done.

17:00 - Dairy cows are milked for the second time and all animals are fed. Calves are fed with milk in the calf nursery.

The four seasons bring the farmer a lot of work:

Spring - all stables have to be cleaned, in the field the soil is prepared for the seeding with plough, cultivator and harrows. In April rape is blooming and the grass is growing very fast. Hay and haylage are done.

Summer - the corn is ripe, the harvest begins. The combine harvester is used to harvest the corn. Maize is grown enough, but the corn ears are to small. Fruit and vegetables are harvested.

Autumn - sugar beet, maize and fruits - all of them are harvested now. The farmer prepares the soil for the seeding of winter crops.

Winter - everything is quiet on the farm. In the orchards twigs are cut and all machines are mend now.

stable - stáj, chlév

field - pole

harvest - sklizeň, sklízet

dairy cow - dojnice

milking parlour - dojírna

milking machine - dojící stroj

feed - krmit

food trolley - krmný vůz

fork - vidle

annual milk yield - roční dojivost

calf nursery - kotec pro telata

plough - orat, pluh

fertilize - hnojit

sow - sít

haylage - senáž

mow - sekat trávu

hay - seno

combine harvester - kombajn

sprayer - potsřikovač

baler binder - balíkovací lis

fodder - krmivo

harrows - brány

rape - řepka

ripe - zralý

corn ear - palice kukuřice

winter crops - ozimy

orchard - sad

twig - větévka

Suggestions how to practice the topic

Read the text and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. Where are the dairy cows milked?

2. What has the farmer to do in spring?

3.What machines does the farmer use?

Choose one of the four seasons and describe, what has the farmer to do!

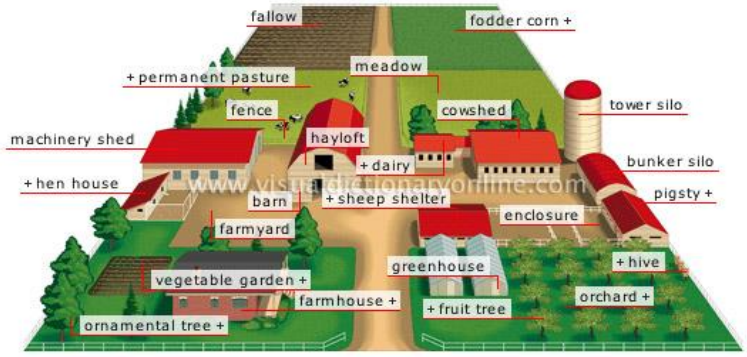
Match the machine and the activity ti is used for:

combine harvestor	making hay bales
sprayer	feed distribution
food trolley	grain harvesting
baler binder	spraying of crops

Make sentences about the topic, use this vocabulary:

milking parlour, calf nursery, tanker, dairy cow, annual milk yield

What parts does a farm have? Describe in pairs, use the picture below!



http://visual.merriam-webster.com/food-kitchen/food/farmstead.php

Název tematického celku: Školní statek v Měšicích a jeho charakteristika.
Basic facts about the school farm in Měšice.

Anotace:
Materiál se zabývá charakteristikou přírodních a výrobních podmínek školního statku, jeho vybaveností, výnosy, užitkovostí a reprodukcí. Dále dává základní informace o praktické výuce žáků, která je nedílnou součástí studia na naší škole.

Klíčová slova:
Facilities, yields, reproduction, cowshed, milking machine, pigsty, orchard, arable land, stable, soil, loose-housing system, manure,

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o školním statku v Měšicích.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne slovní zásobu týkající se přírodních podmínek, vybavení školního statku a jeho hospodaření,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na téma praktická výuka žáků na statku,
5) dokáže informovat o fungování školního statku a praktické výuce.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
VOŠ a SZeŠ Tábor.(Almanach u příležitosti 140. výročí založení školy 1866 - 2006). Tábor: 2006.
Rozbor hospodaření ŠS za rok 2013.

Basic facts about the school farm

The school farm in Měšice is a purpose facility of our school. It has two basic functions. Firstly, it is an agriculture enterprise that runs plant growing and animal production. Secondly, it is an educational institution that helps get and widen practical skills and theoretical knowledge of our pupils about basic agricultural production and also their environmental awareness.

The school farm lies in altitude 450 metres above sea level. The total area of agriculture land is 350 hectares, 300 hectares represent arable land. The agriculture production is typical for that region. They grow mostly cereals and fodder crops for feeding livestock. The animal production is focused on rearing dairy cows of Holstein breed and on pigs of Landrace breed for meat production.

There are various buildings on the farm, e.g. a cowshed (cow-house) with loose-housing system of cattle and modern milking parlour, a pig-shed, some barns used for storing fodder and an area for storing manure - manure store. We can find also a service centre for forklifts and loaders, repairing workshops. There are stables for horses and riding facilities - horse pens, a covered riding hall and a racecourse. You can see a big apple orchard there.

The pupils of our school have their practice on the farm. There are various types of practice, e.g. individual practice, afternoon practice, week practice or all class practice. For that purpose there is a training hall on the farm. It is equipped with agricultural machinery (some tractors, a sewing machine, a potato seedling, a cultivation device, a spraying machine, a manure spreader, a rotational reaper, hay rake and turner, some ploughs and small garden machinery.

The pupils of the specialization horse breeding have their riding trainings there. They can get a riding licence and after that they represent our school in riding competitions in our region and sometimes in the whole country.

Some facts about the history

The school farm was founded in 1866, together with the school. Unlike the school, the school farm belonged to the town, until 1919. Later, the town spread and the farm was found in the middle of it. So in 1920 the rent treaty of the farm belonging to the owner O. Nádherný was signed. The farm was in Měšice and was hired for 50 years. The area of the farm was 203 hectares at that time. Cereals, root crops and fodder crops were grown.

The area of the farm was almost 400 hectares of agricultural land in 1990, from that 305 hectares represented arable land, the rest were meadows and pastures and orchards. The area today is lower because of new road around Tábor. In 2006 the school farm was connected with the school and they create one economic unit.

Animal production on 31 May 2014:

cows	111	sows	62	horses	2
calves	28	piglets	263	-	-
haifers	80	fattening	426	-	-
-	-	small sows	11	-	-
-	-	boars	4	-	-
Total cattle	219	**Total pigs**	766	**Total horses**	2

Harvest results from the year 2013:

Crop	**Growing area** (hectares)	**Total harvest** (tonnes)	**Average yield** (tonnes per hectare)
rape	47,5	36,6	0,76
winter barley	34,0	167,9	4,94
winter wheat	101,4	604,5	5,96
winter tritikale	29,0	149,2	5,14
oats	9,0	32,5	3,6

enterprise - podnik
awarenesss - povědomí
altitude - nadmořská výška
arable land - orná půda
barn - stodola
facility - vybavení
horse pen - ohrada
milking parlour - dojírna
spreader - rozmetadlo
potato seedling - sazečka
hay rake and turner - obracečka
sewing machine - secí stroj
forklift - vysokozdvižný vozík
rent treaty - nájemní smlouva

Suggestions how to practise the topic:

Read the text and translate it.

Check that you understand the text by answering following questions:

1. What natural conditions are there?
2. What is the school farm production focused on?
3. What buildings can you find on the farm?
4. What facilities for horses and riding are there?
5. Can you name some machinery?

Try to make some more questions. Use the questions in the dialogue with your neighbour.

Use the text and complete some information about the history of the school farm:

The school farm was founded in .....

As the town spread the old school farm was found in .....

....was signed with Mr. O. Nádherný.

The farm in Měšice was .....for 50 years.

The area was almost .....of agricultural land.

The area today is lower because of .....

Describe your practical lessons on school farm. Write 10 sentences about it.

What is the purpose of the following buildings and facilities? Give basic information about them:

service centre, barn, milking parlour, workshop, practice hall, orchard, horse pen, pigsties, riding hall

Find the following information in the text - *total state of cattle, number of piglets and boars, total harvest of barley, annual yield of wheat, the altitude of the school farm*

You are a guide of a student group from an agricultural school abroad. Give basic information about natural and production conditions and animal and crop production.

Název tematického celku: Rostlinná výroba v zemědělském podniku.
Plant production.

Anotace:
Materiál představuje rostlinnou výrobu - základní zemědělské plodiny v anglickém jazyce a rozdělení do skupin podle jejich hospodářského využití.

Klíčová slova:
Grain, cereals, fodder crops, oil plants, root crops, nutrients, fruit, vegetables, yields, fertilization, dung.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o rostlinné výrobě.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat veškeré polní plodiny, jejich rozdělení do skupin a práce na poli,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět,
5) dokáže informovat o rostlinné výrobě v České republice.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Voráček, Jaroslav. *Zemědělská angličtina.* 1. vydání. Profi Press, 2004. ISBN 80-86726-08-8.

Plant production

In the Czech republic 54% of the whole area is used for agriculture. 30% of it are forests. The amount of arable land is constantly falling. In the Czech republic we plant fruit, vegetables, grapes, hops, fodder crops - clover, lucerne, oil plants - rape, sunflowers, root crops - potatoes, sugar beet and cereals. The most important sorts of grains are wheat, rye, barely, oats and maize.

There are winter crops and spring crops of all grains except of oats. The farmer sows winter crops in autumn. These sorts use the wet days in autumn for sprouting and as a small plant they stand over the winter because they are forst-hard. In spring, when the weather is warmer, barley, wheat and rye start to grow. Compared with spring crops, which are sowed in spring, winter crops have more time for growing.

Before seeding the farmer has to prepare the fields. He grubs the soil using a plough or cultivator, later he evens the soil out with harrows. The farmer chooses the sort of grains by the climate and soil and he brings the seeds with the drill seeder in the field. It takes ten months till the winter crops are ready for harvest. In this time new plants with strong grain spikes grow in the field.

The farmers mostly produce winter crops, because these plants have higher yields. Wheat is produced supremely, but it has higher requirements for the soil than barley and rye. Wheat and rye are used for bread and bakery goods production. As fodder grains farmers grow barley, oats and maize. Only 20% of the breadstuff is used for flour production. The rest is used for feeding animals.

For plant production is not only soil situation and the climate important, but also the soil quality and soil fertility. For an optimal plant growth are soil cultivation, irrigation, crop rotation and fertilization important.

For its growth, the plant requires sufficient amout of light, water and carbon dioxyde. By means of photosynthesis the plant must produce enough carbonhydrate and provide energy for chemical reactions within its cells.

In addition to these factors, the plant must obtain an adequate amount of soluble salts containing nitrogen, potassium, phosphorus, calcium, iron, magnesium, sulphur and sodium. The plant also requires small quantities of certain elements known as trace elements. These include

manganese, zinc, copper and boron. These elements are supplied to the plants through natural or man-made fertilizers. Man-made fertilizers are made by chemical industry. These are for example nitrogen fertilizers (important for protein formation), phosphorus (important for ripeness of seeds), potash fertilizers (important for sugar and starch formation), limestone fertilizers or sulphur. Natural fertilizers are dung, liquid manure, compost or green manure.

Both, lack of nutrients or overmanuring harms. Overmanuring can also be a serious problem for our environment. The chemicals can leek through the soil into the ground water. But the ground water is very often drinking water for the people.

grape - vinná réva

hops – chmel

fodder crops - pícniny

clover - jetel

lucerne - vojtěška

oil plants - olejniny

rape - řepka

root crops - okopaniny

sugar beet - cukrová řepa

grain - obilí

wheat - pšenice

rye - žito

barley - ječmen

oats - oves

maize - kukuřice

winter crop - ozim

dung - hnůj

frost-hard - odolný vůči mrazu

spring crops - jařina

grub - kypřit

soil - půda

plough - pluh

dung - hnůj, chlévská mrva

harrow - brány

drill seeder - secí stroj

harvest - sklízet

grain spike - obilný klas

yield - výnos

fertility - úrodnost

irrigation - zavlažování

crop rotation - osevní postup

fertilizer - hnojivo

potash fertilizer - draselná hnojiva

green manure - zelené hnojení

Suggestions how to practice the topic

Read the text and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. What are the winter crops?
2. Can you give examples of man-made fertilizers?
3. Why is overmanuring a problem?

What plants are grown in the Czech republic? Complete the chart!

GRAINS	FODDER CROPS	OIL PLANTS	ROOT CROPS	FRUITS	VEGETABLES

Make sentences about the topic, use this vocabulary:

grain spike, natural fertilizers, green manure, overmanuring, crop rotation

Complete the text!

Plant _____ is an important branch of agriculture. Farmers grow _____ as wheat, barely, _____ and _____ . They also grow fodder crops (clover and _____), _____ plants (sunlower and _____) and _____ (potatoes and sugar beet). For higher yields, they use _____ . These are for example _____ and _____ or natural fertilizers as _____ or _____ .

In pairs prepare a short speech about plant production in the Czech republic!

Write a definition for this vocabulary:

wintercrops –

drill seeder –

green manure -

drinking water -

Název tematického celku: Živočišná výroba v zemědělském podniku.
Livestock production.

Anotace:
Materiál představuje živočišnou výrobu - názvy hospodářských zvířat v anglickém jazyce, výrazy pro ženský a mužský rod a mláďata. Dále se zabývá jejich hospodářským významem - jaké potraviny a suroviny nám poskytují. Uvádí základní informace o krmení, ustájení a reprodukci.

Klíčová slova:
Cattle, pig, poultry, sheep, meat, fat, raw material, stable, shed, livestock, stabling, Hay, teat, service, bone meal, slaughter weight, roasts, chops, approach, welfare

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o živočišné výrobě.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat hospodářská zvířata včetně mláďat, popíše péči o ně, zná výrazy pro potraviny a suroviny, které nám poskytují,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na dané téma
5) dokáže informovat o chovu hospodářských zvířat a jeho významu.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Miškovský, Zdeněk a kol. *Chov zvířat - učebnice pro střední zemědělské školy.*1.vydání. Praha: Vydavatelství Credit, 1995. ISBN 80-901645-4-4.
Voráček, Jaroslav. *Zemědělská angličtina*. 1. vydání. Praha: Profi Press, s.r.o. 2004. ISBN 80-86726-08-8.

Livestock production

Livestock or farm animals are domestic animals which are kept for agricultural use. Among the main group of farm animals are cattle, pigs, poultry, sheep, goats, horses, rabbits, etc.

Cattle - cows, bulls, haifers, calves

Cattle breeding is one of the most important branch of livestock production. The main products of cattle are milk and meat The cattle breeds are classified as either dairy or beef. There are breeds which differ in colour, size and milk or meat yields. The typical dairy breeds are Jersey cows, the typical beef breeds are Angus or Charolais.

Cattle can be kept either outside, in the pastures from May to September, there are usually beef breeds or in the shed, those are usually dairy cows. The farmers use two kinds of housing or stabling: Tie-up housing system, it means that the cows have their own stand without moving.The second is loose-housing system or free stabling, the cows have relatively free movement

Feedstuff. Cattle is fed with hay, green crops, silage, feed concentrate and minerals.

Milking. Dairy cows are milked twice a day. The average milk yield from one cow is 7 - 10,000 litres a year. It depends on the breed or on the age of a dairy cow.. Milking takes places in a milking parlour, there are many various kinds of them, e.g. one-row, two-row or rotary milking parlours.The modern way of milking is using milking robots. The entry of cows into the milking unit, and the attachment and removal of the teat cups are automated.

Reproduction. The age at first service is about twenty-one months, so that they bring the first calf at thirty months.Cows are served either naturally by the bull, or more commonly, by artificial insemination. The average period of gestation (pregnancy) is about 280 days.

Importance of cattle breeding. It provides food (milk, beef, veal), feedstuff for farm animals (colostrums, meat and bone meal). It gives important raw materials (skin, bones, hair, horn). It uses vegetal feedstuff (waste from plant production) and food processing waste. Last but not least it produces animal manure.

Pigs - saws, boars, piglets

Pig breeding has a long tradition. It is another important branch of livestock production. Pigs are valued as meat producers. Of all the farm animals, the pig has the greatest capacity to accumulate body fat. They grow quickly and have a lot of piglets. (the average number of piglets is 10 - 14). Pork is rich in proteins, vitamins and minerals, e.g. iron and potassium. It is

favourite for its nutrition value, tastiness and universal use. The highest priced cuts of meat are from the back (roasts and chops) and from the leg (ham).

Feedstuff. Pigs are fed with cereals, beet, potatoes, maize and feed concentrate. Each pig needs 3 kilogrammes of feedstuff to gain 1 kilogramme. They got the slaughter weight of 110 kg after approximately 6 months.

Breeds in the Czech Rebpublic. The most common breeds of pigs are Large white pig, Landrace, Black-spotted Přeštice pig and Duroc.

Reproduction. The mating is done either naturally or by insemination. The pregnancy of a saw lasts approximately 115 days.

Importance of pig breeding. It provides food (pork and fat) and a lot of raw materials (skin, bones,cartilages, intestines, bristles, blood).

Poultry

Poultry are domesticated fowls that are raised primarily for their meat, eggs or feathers, such as chickens, turkeys, ducks and geese. Chicken provide nearly all the eggs and poultry meat that we eat and they are sometimes classified as lying, table, dual-purpose and fancy breeds.

Sheep - ewes, rams, lambs

Sheep have been used by man for thousands of years for their wool and meat. In the Czech Republic sheep do not belong among the most important farm animals, but they are valued in some regions, especially in the hills and in the uplands, where they are an important factor of countryside management.

Animal welfare. The important factor in livestock breeding is ethical approach to livestock. The farm animals should have good living conditions - free access to fresh water and feedstuff, prevention or quick treatment, avoiding fear and stress, possibility of natural behaviour.

breed - chovat, plemeno
yield - výnos
housing, stabling - ustájení
tie-up housing - vazné ustájení
loose-housing - volné ustájení
feed concentrate - jadrné krmivo
hay - seno
attachment - připojení
gestation, pregnancy - březost
bone meal - kostní moučka
potassium - draslík
roasts and chops - pečeně a kotlety
slaughter weight - jateční váha
cartilage - chrupavka
bristles - štětiny
intestines - střeva

Suggestions how to practise the topic:

Read the text and translate it.

Check that you understand the text by answering the following questions:

1. What farm animals do you know?
2. How can you divide the cattle breeds?
3. What are two most common stabling systems? What do they differ in?
4. Can you give basic information about feedstuff and milking?
5. What do you know about cattle reproduction?
6. What is the advantage of milking robots?

Work in pairs. Make similar questions about pig breeding. Use them in a dialogue.

Fill in the chart with the following animals: Turkey, Landrace, piglet, chicken, duck, saw, bull, haifer, lamb, geese, cow, boar, duckling, Angus, White big, calf.

Cattle	Poultry	Pigs	Youngs

Work in pairs. Discuss the advantages and disdvantages of tie-up housing system and loose-housing system.

Complete the sentences. Use vocabulary from the end of the text:

1. One of the most important components of livestock feedstuff is ……..
2. ……. is done either naturally or by artificial insemination.
3. The average period of …….. of a caw is 280 days.
4. The highest priced cuts of pork are …… ……. and ……...
5. Animal welfare means ethical …….. to animals.

Work in pairs. Find the raw materials which people get from farm animals in the text. Discuss what are they used for.

Explain the term *animal welfare*. Compare the care of farm animals in organic and conventional farming.

Summarize the importance of cattle and pigs breeding. Write down examples of food and raw materials which people get from farm animals.

Název tematického celku: Alternativní zdroje energie a jejich budoucnost.
Alternative sources of energy and their future.

Anotace:
Materiál představuje obnovitelné zdroje energie, základní údaje o nich, jejich výhody a nevýhody a jejich význam pro ochranu životního prostředí.

Klíčová slova:
Source of energy, elektricity, efficient, power plant, geothermal, tidal, biomass, wind power, wind mill, solar energy, pollution, landscape.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o alternativních zdrojích energie.
2) Oborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat obnovitelné zdroje energie a klady a zápory jejich využití,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede diskuzi na dané téma,
5) dokáže informovat o biomase, sluneční, větrné a vodní energii, dokáže obhájit jejich význam pro ochranu životního prostředí.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Grygera, F. Tajemná biomasa. *Doma Dnes.* Praha: Mafra a.s., ročník XXIV, č. 42, ISSN 1210 1168.
Zelená energie. Obnovitelné zdroje energie (www. dokument). Dostupné z: http://www.nazeleno.cz/cs/o-zelené-energii.

Alternative sources of energy and their future

Most of the energy we use today comes from coal, oil and gas. But these will not last for ever and burning them is slowly harming the atmosphere. We need to look for other ways of supplying energy. The possible solution is using renewable sources of energy. Renewable sources of energy are the forms of energy which are able to renew while being partially, or completely exhausted.

Biomass. It is material of organic - vegetal or animal origin. It is divided into *dry* and *wet* biomass. *Dry biomass* is everything what burns e.g. wood, slivers, saw dust, pelets or straw. *Wet biomass* does not burn but it it possible to use it in biogas plants . It includes grass, slurry, excrements, kitchen garbage or slaughter waste. In a biogas plant biogas is produced with the help of fermentation. After that it is converted into electricity and heat which is used for domestic and industrial heating. The bioenergy does not contribute to climatic changes caused by emissions of carbon dioxide or other harmful gases. The manipulation and exploitation of biomass create new jobs opportunities. Biomass is a very perspective source of energy in the Czech Republic.

Wind power. It is conversion of wind energy into electricity. All over the world modern windmills (wind turbines) are built that spin in the wind. A group of windmills in the same location for production of electricity is called *a wind farm.* In the Czech Republic the possibilities of using this source of energy is quite limited because of continental climate with irregular airflow. The wind farm are usually situated offshore or in higher altitude. Wind power is very ecological source of energy. It consumes no fuel and emits no air pollution. However, according to some ecologists, the wind turbines kill the birds ,they are noisy and they destroy the esthetic visage of the landscape.

Solar power is a way of using the sun´s energy in the form of solar radiation as heat or to make electricity. We use *photovoltaic panels* and *solar thermal collectors* for that. The oponents of solar power plants argue that these power plants are not efficient. The power depends on climatic conditions. If the weather is cloudy, the output goes down. To produce the same amount of electricity as in the thermal power station, the solar power plant would take too large area of land. This could cause the change of biotope there. Photovoltaic panels also damage the visual aspect of the countryside. On the other hand, this kind of power plant does not emit harmful substances into the air.

Hydroelectric power. The energy of water is historically the oldest exploited source of energy which is used to generate electricity. The hydroelelectric power plants are predominate renewable source of energy in the Czech Republic. The consumption of 500,000 households is covered nowadays. For generation of electricity the mechanical hydropower is the most important. The production of electrical power uses the force of falling and flowing water. Most of the power comes from energy of water concentrated in big dams. Generation of hydroelectric power eliminate the costs of fuel, hydroelectric power plants have long economic lives, they could be in service for 50 - 100 years and they do not produce carbon dioxide. There are also some negative items, e.g. the costs of a dam contruction are very high, the realisation is very demanding and recoverability of the financial costs depends on exploitation of generated electricity. Tidal power plants make use of sea water flowing in and out with the tides .

Geothermal energy. It is the energy generated and stored in the earth. Hot springs, geysers, pools of boiling mud and fumaroles are the most easily exploited sources of that energy. It is also possible to use geothermal wells but that is technologically very demanding. Geothermal energy is mostly used for home heating, e.g. in Iceland, New Zealand, the USA, the UK and Switzerland where the natural conditions are convenient. Geothermal wells release some greenhouse gases, but it is much lower than those of fossil fuels. This energy is effective, reliable, sustainable and environmental friendly.

supply - dodávat, zásobovat
exhausted - vyčerpaný
slivers - štěpky
garbage - odpadky
slaughter - porážka (dobytka)
slurry - kejda, splašky
saw dust - piliny
straw - sláma
exploitation - využití
conversion - přeměna
carbon dioxide - oxid uhličitý
reliable - spolehlivý
offshore - blízko pobřeží
altitude - nadmořská výška
efficient - výkonný, účinný
output - výkon
generation - výroba
recoverability - návratnost
tidal - přílivový
demanding - náročný
convenient - vhodný
release - uvolnit, uvolňovat
well - studna, vrt
sustainable - udržitelný

Suggestions how to practise the topic

Read the text and translate it. You can work in pairs or groups of four.

Read the text about renewable sources of energy and complete the sentences.

1. Organic material which is used as dry biomass is called ……
2. The windmills are usually situated …… or ……
3. Energy that uses the sun´s rays is called ……..…….
4. The solar power plant does not emit ……..….. into the air.
5. Energy can be made from rivers in mountainous areas. This is called …….……
6. …… power plants make use of sea water flowing in and out with the tides.
7. The energy generated and stored in the Earth is called …….……
8. The most exploited sources of geothermal energy are ……..

Match the expressions *1 - 5* with the kind of energy *a - e.*

1. It takes large area of land and changes biotope.
2. Organic material is used for heating and producing electricity.
3. The power depends on climatic conditions, the power plants are usually situated at the seaside or in the mountains.
4. It is mostly used in Iceland and New Zealand.
5. The generation of electrical power uses the force of falling and flowing water.

a) hydroelectric power
b) geothermal energy
c) biomass
d) solar power
e) wind power

Work in pairs. Discuss positives and negatives of renewable sources of energy. Put the findings into the chart.

Read the text and make at least six questions about the topic. Use the questions in the dialogue with your neighbour.

Název tematického celku: Botanická zahrada v Táboře a její význam.
Botanical garden in Tábor and its function.

Anotace:
Materiál pojednává o botanické zahradě v Táboře. Stručně informuje o její historii, dále popisuje její části - hospodářský systém, arboretum, alpinum, skleníky. Zmiňuje také zvířata, která se zde vyskytují.

Klíčová slova:
Area, classification of plants, cooperate, plant species, arboretum, agricultural system, mountain biotope, handicapped animals, greenhouse, carnivorous plants.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o botanické zahradě v Táboře.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat části botanické zahrady, plodiny hospodářského systému, rostliny ve sklenících,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na dané téma,
5) dokáže informovat o botanické zahradě, o její historii a jejích částech a pohovoří o jejím významu v současnosti.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
http://szestabor.cz/botanicka/

Botanical garden in Tábor and its function

The Botanical Garden of teh Secondary Agicultural School and College in Tábor is the second oldest botanical garden in the Czech Republic and the only one in South Bohemia. Its current area amounts to 2,5 hectares. It was founded in 1866 together with the school. The main task of the garden was and is education of young agricultural specialists. At the time when the construction of the garden was finished there were about 2500 plant sorts. In the arboretum, a few hundrets of taxa of tree species were planted, and a unique agricultural system was set up. The Botanical Garden in Tábor was the first one to use the classification of plants according to agricultural and industrial importance. In 1907, the Botanical Garden began swapping seeds and plants all over the world. The cooperation and exchange with botanical gardens has lasted up to now - it is cooperating with about 400 gardens nowadays.

The present botanical garden includes agricultural system. It means that plant sorts are arranged according to their historical and present agricultural use. Examples of plant groups belonging to the agriculture system are: medical herbs, poisonous plants, fibre plants, essences, legumes, rubber plants, starch plants, grasses, weeds, fodder crops, oil plants, root crops, tobaccos, species or cereals.

The next part is arboretum with approximately 400 kinds of trees and bushes which are of botanical and historical value as well. You can find there also a lake and a small creek flows through this part of botanical garden. The next parts are the alpinum which includes natural mountain biotope and three greenhouses. The area of the greenhouses is about 400 square meters and you can find collections of succulent plants, bromelia plants, orchids, carvinorous plants and tropical and subtropical plants there.

The garden provides also a shelter for handicapped animals, so in the last years you could see for example eagle owl, fox or common buzzard living in the garden.

The most valuable plant of the garden is wollemia. It is a valuable coniferous tree. It was considered extinct. It grew on the Earth 200 million years ago. It is described as a living fossil, because there are only about 100 wollemias growing in the wild.

In 1994, the Botanical Garden was declared a scenic reserve, and in August 2000, the Ministery of Culture put the garden and the school building on the list of the Cultural Heritage. The

Botanical Garden is also a member of the Union of the Botanical Gardens of the Czech Republic.

Since 2002 the Botanical Garden has been under reconstruction. The unique system of fields in the upper part has been replanted with important groups of plants (rice, cotton plant, groundnut, sesame and others). A new entrance and an outside wall have been built up, and now the network of paths is being reconstructed.

current - současný

arboretum - arboretum

species - druhy

set up - uspořádat

swap - výměna

seeds - semena

medical herbs - léčivky

poisonous plants - jedovaté rostliny

fibre plants - přadné rostliny

essences - silice

legumes - luštěniny

rubber plants - pryžovité rostliny

starch plants - škrobnaté rostliny

grasses - trávy

weeds - plevele

fodder crops - pícniny

cereals - obiloviny

creek - potok

succulent plants - sukulenty

carnivorous plants - masožravé rostliny

shelter - útočiště

eagle owl - výr velký

common buzzard - káně lesní

coniferous tree - jehličnatý strom

extinct - vyhynulý

heritage - dědictví

cotton plant - bavlník

sesame - sezam

groundnut - podzemnice olejná

approximately - přibližně

bushes - keře

entrance - vchod

provide - posktnout

value - hodnota

use - použití

greenhouse - skleník

Suggestions how to practice the topic

Read the text and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. What do you know about the history of the garden?
2. What part are there in the garden?
3. Are there any animals living in the garden?

Describe the parts of the garden. Use the map below!

http://szestabor.cz/botanicka/?m=2

Make sentences about the topic, use this vocabulary:

greenhouse, creek, agricultural system, medical herbs, shelter

In pairs prepare a short speech about Botanical Garden in Tábor for a group of English speaking students!

Název tematického celku: Ekologické zemědělství dnes.
Organic farming today.

Anotace:
Materiál seznamuje s ekologickým zemědělstvím, obecně s jeho základními principy a metodami a s ekologickým zemědělstvím v České republice, s bioprodukty, výhodami a nevýhodami tohoto způsobu hospodaření.

Klíčová slova:
Rely on, crop rotation, green manure, considerate cultivation, strictly limited, feed additives, rural tourism, environmental care, ethical approach ,welfare.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o ekologickém zemědělství.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat zásady a metody ekologického zemědělství,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na téma výhody a nevýhody tohoto typu hospodaření z hlediska farmáře i spotřebitele,
5) dokáže informovat o agroturistice a jejím významu.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Tichá, Klára. *Biologická ochrana rostlin.* 1. vydání. Praha: Grada Publishing,spol.s.r.o.,2001. ISBN 80-247-9043-2.
Ekologické zemědělství v ČR: Jak jsme na tom (www. dokument).
Dostupné z: http://www.nazeleno.cz/ekologické-zemedelstvi-v-cr

Organic farming today

Organic agriculture is a production system that sustains the health of soil, ecosystems and people. It combines scientific knowledges and modern technology with traditional farming practices.

Principles and methods. The basic principle of organic farming is a biological circulation: H*ealthy soil - healthy crops - healthy animals - healthy food - healthy people - landscape in good condition.*. To keep and improve the soil fertility and to produce *healthy food* are the main aims of organic farmers. The way of farming relies on *crop rotation, considerate cultivation of land and using biological pest control*. Thanks to crop rotation the biological balance is formed which improves the ability of crops resist pests and diseases.

Biological pest control is a considerate method that does not threaten the environment. Pests are liquidated with the help of their natural enemies. This method is suitable because it does not harm the environment and does not threaten non-aim organisms. It does not need expensive device, energy and other costs.

Using of *feed additives* and *fertilizers* is strictly limited in organic farming. To have higher yields the farmers use *organic fertilizers, green manure and compost*.

Livestock. Animal welfare is a very important part of organic farming. Animals on an organic farm must live in "natural" living conditions. They are fed mostly from own organic production and they can live according to their physiological needs. The ethic approach is important - they must have enough space, posibility to move and graze outside, even in winter.

Organic farming in the Czech Republic. Organic farming has been developed in the Czech Republic since 1990. The number of organic farms has grown significantly, e.g. at the end of the year 2010 there were about 3,5000 of them. In 1990, the Czech Republic had only three farms that applied organic farming methods. Nowadays they work on approximately 10 % of the whole agriculture land.

Bioproducts. There are about 600 producers of bioproducts. Mostly cereals are processed, especially spelt and buckwheat, then spices and herbs. As for animal production, the most common are beef and goat milk. There is lack of poultry, fish meat and pork, fresh eggs and milk products. Some bioproducts are sold as conventional products at the market.

That is because the possibilities of processing industry are limited, e.g. there are not many required bio slaughterhouses available. Most of bioproducts are imported.
Organic farming is regulated by many directives (e.g. bioproducts are considered only products grown on land without chemical fertilizers used for the last 3 years or amount of nitrogen in manure must not exceed 150 kg/hectare on arable land and 85 kg/hectare on meadows and pastures).

Rural tourism. It is a way of spending free time in the country. Visitors are provided accommodation on the farm, in typical rural conditions. Sometimes the staying is connected with voluntary work in agriculture. The aim is to learn more about farming, about hard, everyday work of farmers. Visitors have close contact with animals, agriculture crops, they gain better realation to soil. It also helps keep culture and social traditions. Rural tourism can have different forms, e.g. horse riding and care, wine production and work in the wineyard, help with making hay, etc.

Rural tourism has a lot of positives. It is an expanding branch that can contribute to solve some social and economical problems of the country. Money from that stay on the farm and can be invested again or help the farmers improve their life. Of course, there are also some negatives, e.g. the main tourist seeason mean the main agriculture season as well. It can get the farmer to the time pressure because the staying of guests means more work for the farmer. Sometimes it can have environmental impact, e.g. animal disturbing, field road damaging, etc.

sustain - udržet,podporovat
soil fertility - úrodnost půdy
considerate - šetrný
rely - spoléhat na
pest control - ničení škůdců
disease - choroba, nemoc
threaten - ohrozit, ohrožovat
approach - přístup
graze - pást
spelt - pšenice špalda
buckwheat - pohanka
lack - nedostatek
slaughterhouse - jatka
required - požadovaný
consider - považovat
amount - množství
rural tourism - agroturistika
disturb - rušit, vyrušovat
provide - poskytovat
voluntary - dobrovolný
gain - získat
nitrogen - dusík

Suggestions how to practise the topic

Read the text and translate it.

Read the text carefully and complete the sentences.

The basic principle of organic farming is ……..

To keep and improve the …… and to produce ……..…

are the main aims of organic farming.

The way of farming relies on …….

Biological pest control does not …… the environment.

Using of ……. and ……... is strictly limited.

To have higher yields the farmers use …….…….

The ethic approach to animals is called ……..……..

Work in pairs. Discuss the differences between organic farming and conventional agriculture. Put your ideas into the chart:

Organic farming	Conventional agriculture

Can you specify basic advanatges and disadvantages of organic farming?

Advantages: …….

Disadvantages: …… …….

Answer the questions:

1. What do you know about animal welfare?
2. Do you buy bioproducts? Why? Why not?
3. Is organic farming regulated?

Read the text and try to form 5 questions about organic farming and rural tourism.

Work in pairs. Use the previous questions in a dialogue.

Název tematického celku: Ohrožená zvířata kolem nás.
Endangered animals in the world.

Anotace:
Materiál se zabývá ohroženými druhy zvířat, příčinami jejich ohrožení, příklady ohrožených druhů, informuje o CITES, zmiňuje problematiku pytláctví a pašování zvířat.

Klíčová slova:
Endangered species, habitat, mammal, altitude, poaching, fur trade, extinct, hunting, ivory, toad.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o ohrožených zvířatech.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat příčiny ohrožení, příklady ohrožených druhů,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na dané téma,
5) dokáže informovat o problematice ohrožených druhů, o jejích příčinách a nelegálním obchodu se zvířaty.

Literární zdroje a jiné prameny:
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Endangered animals in the world

Wildlife means all the plants, animals and other living things found in the wild. These can be mammals, reptiles, fish, insects, etc. Some are already extinct and many more are in serious danger nowadays. There are reasons why some types of plants and animals are becoming endangered species:

Losing or changing their habitats. *Habitats* are the places where animals live. They are all around us - on the land, in the water, in the city and in the countryside. Habitats can be large, like woodlands and farmlands, or small, like ponds and hedgerows. The destroying of them started 10,000 years ago, with the beginning of agriculture. That brings destruction of forests, jungles, marshes, meadows or steppes with. Fast growing towns and construction of big dams are also harmful for habitats.

Chemical pollution. Natural ecosystem is damaged by using various *chemicals* as a result of human activities. Chemicals get into animal organisms and harm them.

Air pollution. That is caused by burning fossil fuels, emissions from industrial production, car exhausts. Pollutants emitted into the atmosphere mix with water vapour and form acids which fall down on the earth as *acid rain*. That kills trees and contaminates water and kill fish in the rivers.

Climate change. *Global warming* can influence life of some animal species, e.g. some mountain animals move to higher altitude, reproduction cycle of some bird species begins earlier in spring.

Hunting. Man has always been a hunter. He still is. But many modern hunters do not just kill for food - they kill for profit. That is why so many rare and protected animals are still dying. Hunters like these are called *poachers.* Animals are hunted for fur (snow leopard, jaguar, lynx), for ivory (elephants), tusks (rhinos), skin (crocodiles) and feather (parrots). Poaching is illegal. Animals are killed or caught into traps. These are made of metal and are very sharp. Most animals caught in traps die very slowly.

Selling or transporting an animal that is considered an endangered species is illegal. Many live animals are captured in their native habitats and sold as pets or for research, or are killed and their parts sold for medicines, food or clothing. But today animal smuggling is a big unlawful international business. Countries worldwide are trying to do something to stop this crime. About

180 countries have signed the Convention on International Trade in Endangered Species (CITES) which requires special licences to move endangered plants and animals across country borders. It also prohibits trading animals that are nearly extinct.

We need to save many species of endangered wildlife from extinction before it is too late. There is only one way to save wild animals - conservation. That means

- protecting animals in danger by law,
- opening more national parks,
- building fewer new roads,
- planting more now forest,
- cutting pollution.

You can find the list of endangered animal species in *Red Book of Endangered Species* which was created by the International Union of Nature Protection. This organization unite scientists from all over the world.

Examples of endangered animals in the Czech Republic:

Mammals (wildcat, bear, bat, beaver, otter, moose, lynx)
Birds (eagle, falcon, stork)
Reptiles (lizard, grass snake, viper)
Amphibians (toad, tree frog)

mammal - savec
reptile - plaz
insect - hmyz
marsh - mokřina
altitude - nadmořská výška
car exhausts - výfukové plyny
species - druhy
poacher - pytlák
trap - past
ivory - slonovina
feather - peří
captured - v zajetí
smuggling - pašování
extinct - vyhynulý
conservation - ochrana
badger - jezevec
otter - vydra
moose - los
lynx - rys
lizard - ještěrka
viper - zmije
toad - ropucha
stark - čáp
moose - los

Suggestions how to practise the topic

Read the text and translate it.

Work in groups of four. Read the text carefully and follow the instructions.

1. Find examples of animal groups: mammals, …….……
2. Find examples of habitats: woodlands, …….…….……
3. Find reasons why some animal species are endangered: air pollution, ….……..……
4. Find what does CITES mean: ……..…...

Answer the questions about the text.

1. What are the main reasons of air pollution?
2. What impact do climate changes have on animals?
3. What does poaching mean?
4. What animals are killed for fur?
5. What is the difference between a hunter and a poacher?

Try to create other questions and use them in a dialogue with your neighbour.

Find some more information about CITES on the Internet. Compare your findings with your neighbour.

Read the text and find some suggestions how to save wild endangered species of animals.

Can you name some more examples of endangered animals in our country? Use the Internet.

There are some expressions from the text. Use them in sentences.

in serious danger, habitats, higher altitude, animal smuggling, acid rain, save from extinction

What is the text about? Summarize it in approximately ten sentences and write them down.

Název tematického celku: Globální ekologické problémy světa.
Global problems of the world environment.

Anotace:
Materiál představuje hlavní problémy životního prostředí - globální oteplování, skleníkový efekt, tenčení ozónové vrstvy, znečištění ovzduší a vody, odlesňování. Zabývá se příčinami a dopady těchto jevů.

Klíčová slova:
Global warming, ozone layer, greenhouse effect, deforestation, air pollution, cause, effect, Earth´s surface, carbon dioxide, flooding, acid rain.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o globálních ekologických problémech světa.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne použít výrazy týkající se globálního oteplování, tenčení ozonové vrstvy, skleníkového efektu, znečištění ovzduší a vody a odlesňování krajiny,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede diskuzi o možnostech zmírnění negativního vlivu na životní prostředí,
5) dokáže informovat o hlavních problémech životního prostředí, příčinách a dopadech těchto jevů.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Hájková, Jarmila a kol. *Anglicko-Český a Česko-Anglický slovník ekologie a životního prostředí*. 1. vydání. Fontána, 1998. ISBN 80-86179-11-7.

Global problems of the world environment

The Earth's environment is made up of the atmosphere, the hydrosphere, the lithosphere and the biosphere. For millions of years, these four parts have been in balance. Although civilization has brought people many advantages, its products pollute and damage the environment in which we live. To the global problems of the world fall global warming, demaged ozone layer, deforestation and water and air pollution.

Global warming. Global warming is caused by the greenhouse effect. The Earth has a thin atmosphere that is like a transparent blanket that keep us warm. Normally, heat from the sun warms the Earth and then escapes back into space. But carbon dioxide and other gases in the atmosphere trap the sun's heat and this is slowly making the Earth warmer.

Scientists say the temperature of the Earth could rise by 3˚C over the next 50 years. This could cause unpredictable weather in the form of flooding and drought or rising sea levels as ice in the North and South Poles begins to melt.

The ozone layer. The ozone layer is a layer of gas about 30 kilometers above the Earth's surface that helps to protect it from the sun's ultraviolet radiation. Ultraviolet radiation causes demage to the DNA of cells and various cancers can result especially after sunbathing. Sheep in high altitude in the Andes are often blinded by ultraviolet radiation.

Scientists discovered that the ozone layer in the atmosphere over the Antarctic was missing. In other populated places such as Australia it was very thin. These holes in the ozone layer are caused by substances called CFCs (chlorofluorocarbons). CFCs were used in refrigerators, aerosol cans, car air conditioning and in the manufacture of some plastic products. Using CFCs is banned today.

Deforestation. As humans we like to eat meat and the modern trend for beef burgers has increased the demand for cattle and more space worldwide. We also use more hard wood for furniture. That is why tropical rainforests are being burnt and cut down - people need more land for agriculture. This is happening in the Amazon basin in Brazil and also in southeast of Asia.

But rainforests are important for our enviroment. They help to control global warming because they absorb carbon dioxide in the proces called photosynthesis. Without trees carbon dioxide levels will increase. Many rainforests also grow on poor soils, and when they are cut down or

burned, the soil is washed away in tropical rains, so the area may turn to desert. Many plant and animal species that live there could become extinct.

Water and air pollution. We produce lots of waste in the home and toxic chemicals from industrial processes. These should be disposed of safely. But it is less expensive to dump waste and toxic chemicals into rivers or holes in the ground than to dispose of them safely.

Factories, power stations and motor vehicles pump large quantities of carbon dioxide and other waste into the air. This is a major cause of the greenhouse effect. Chemicals are also used to kill pests in agriculture to increase production. Pesticides and chemical fertilizers leak into our waterways and pollute them.

Coal burning in power stations releases sulphur dioxide into the atmosphere. Car exhaust gases add other acids. These mix with water in clouds and acid rain is formed. Acid rain demages buildings, leaves on trees and other plants and it also can kill fish in lakes and rivers.

environment - životní prostředí

pollute - znečišťovat

damage - poškodit

ozone layer - ozonová vrstva

cause - způsobit

greenhouse effect - skleníkový efekt

carbon dioxide - oxid uhličitý

trap - chytit

unpredictable - nepředvídatelný

flooding - záplava

leak - unikat

acid rain - kyselý déšť

drought - sucho

protect - chránit

ultraviolet radiation - ultrafialové záření

ban - zakázat

altitude - nadmořská výška

deforestation - odlesňování

rainforest - deštný prales

extinct - vyhynulý

waste - odpad

dispose of - zbavit se, zlikvidovat

sulphur dioxide - oxid siřičitý

basin - povodí

Suggestions how to practice the topic

Read the text about the global problems of the world environment and translate it.

Describe the pictures!

http://en.wikipedia.org/wiki/File:AlfedPalmersmokestacks.jpg

http://en.wikipedia.org/wiki/File:Manantenina_bushfire.jpg

In pairs make questions according to the text and answer them in a dialogue! For example:

1. Why is the ozone layer important?
2. Why are the rainforests cut down?

Complete the chart. Then make sentences with six of the words you wrote!

Verb	Noun	Adjective
	pollution	
leak		
		dangerous

Complete the text!

Rainforests help to control global warming because they absorb _____. A larger greenhouse _____ means _____ of the overal temperature. This could cause _____ sea levels, _____ weather in the form of _____ or drought, hurricanes and large loss of life.

In small groups discuss how can you personally protect the environment and what should the government do!

Název tematického celku: Chov koní a agroturistika.
Horse breeding and agritourism.

Anotace:
Materiál se zabývá slovní zásobou o chovu koní, pojmenovává základní vybavení jezdce, uvádí jejich rozdělení do skupin, seznamuje s péčí o koně a jejich využitím. Představuje agroturistiku jako významnou část trávení volného času v dnešní době.

Klíčová slova:
Mare, stallion, gelding, foal, riding, racing, , horse shoe, whip, hoof, bridle, reins, saddle, stirrups, stabling

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o chovu koní a agroturistice.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat části těla koně a jeho postroje, základní skupiny, jejich charakteristické rysy, výrazy týkající se péče o koně,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na téma agroturistika jako způsob využití volného času,
5) dokáže informovat o problematice chovu koní a jeho významu.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Navrátil, Jan. *Základy chovu koní* . 3. vydání. Praha: Ústav zemědělských a potravinářských informací, 2007. ISBN 978-80-7271-186-4.
Voráček, Jaroslav. Zemědělská angličtina. 1. vydání. Praha: Profi Press, s.r.o. 2004. ISBN 80-86726-08-8.

Horse breeding and agritourism

Horses are animals of very old domestication used as draught animals and as pleasure animals for riding. In the history the horse became important helper of a man.

Male of a horse is called *a stallion, a gelding* is a horse that has been castrated. Female is called *a mare* and a young is *a foal.*

Importance. We can divide the importance of horses into four basic groups:

1. Culture and sport.

There are different competitions or races, e.g. show jumping races, steeplechase, trotting races, gallop races, military, drilling competitions and team races.

A horse has also special use, e.g. at mounted police or in hipotherapy (treatmet of kinetic system or mental handicaps). Keeping and raising of horses is hobby for a lot of people. We can see horses in different games, e.g. pushball, horse polo, Hubert´s ride, skijöring.

2. Using a horse as a draught animal.

A horse is usually used in forestry. It is very important work done by horses from the ecological point of views. It is also used in agriculture for some specific work.

3. Weight carrying.

Horses are used in upland areas or in rural tourism.

4. *Production of raw materials*.

Horses provide food and valuable raw materials, e.g. milk, meat, skin, horsehair, hoofs, manure and mainly blood serum and vaccination materials for human and veterinary medicine.

Breeds. There are about 400 different breeds of horses. The breeds are sorted according to different points of view, e.g. the level of breeding, predominant efficiency, geographical extention, countries of origin, massiveness, etc. Except from that we usually divide horses according to their temperament into warm-blood horsed and cold-blood horses, into blood horses and half-breed horses

In the Czech Republic the raising of racing horses prevails. There are Czech warm-blood horses or English blood horses. In Kladruby and Slatiňany there is bred a special breed of a massive white or black horse with Roman nose that is used in team of horses. This breed is called „national cultural monument“ because it is the typical Czech breed.

Reproduction. Mares give birth to one foal (twins are exceptional and just one usually stays alive. The pregnancy lasts about 330 days. A mare gives approximately 6 - 12 foals.

The care of a horse. It is necessary to take care of the hygiene. The whole body, hair, hoofs must be cleaned two times a day. Hoofs are protected by horse shoes that must be changed once every six weeks.

Horses are fed with hay or green fodder in the pasture period, with concentrate - oats, with rootcrops - beet and carrots. Horses are fed three times a day and they need 20 - 40 litres of quality water.

They need quality straw for bedding (fodder straw can be added for them to eat). There are three basic systems of housing/stabling:

- free stabling (the most convenient for horses,demanding for space)
- stabling in boxes (for sport- and breed horses, for pregnant mares)
- tie-up system (for draught horses, least suitable)

Equipment for riding. The rider has to wear a helmet, riding trausers and boots, he or she needs a riding whip. For the horse it is necessary to have a bridle and reins, a saddle and stirrups.

Horses and agritourism. Agritourism is a kind of holidays in which tourist visit a country, stay with local people who live in the countryside. Hipotourism has became very popular nowadays. It is favourite kind of spending free time. It is suitable for every age. You can do something for your health and get good feeling from the direct contact with cultivated animal. In the Czech Republic there is a net of horse trails, where you can travel around with your horse. There are hundreds of stations (boarding houses, farm, challets) where you can stay at night with your horse. If you want to spend some time in nature, why not in the saddle?

draught horse - tažný kůň
show jumping - parkur
trot - klus
gallop - cval
drilling - drezura
team of horses - spřežení
weight carrying - nošení břemen
hoof - kopyto
efficiency - užitkovost
prevail - převažovat
pregnancy - březost
concentrate - jadrné krmivo
straw - sláma
whip - bič
bridle - uzda
reins - otěže
stirrup - třmen
cultivated - ušlechtilý
suitable - vhodný
saddle - sedlo

Suggestions how to practise the topic:

Read the text aloud and translate it.

Check that you understand the text by answering the following questions:

1. In what branches of human activity is a horse used nowadays?
2. What raw materials does a horse provide?
3. Can you name some basic horse breeds?
4. Which breed are raising mostly in the Czech Republic ?
5. What do you know about horse reproduction?

Work in pairs. Make similar questions about the text. Use the questions in a dialogue with your neighbour.

Fill in the gaps with a suitable word. Use the text.

1. Male of a horse is called ……..…….
2. Female of a horse is called ……..….
3. A young horse is called ……....
4. A horse is usually needed in ……. and ……....
5. A horse has also a special use, e.g. at …….. or in ……...

Can you add some more sentences to fill in?

We can divide the importance of horses into four groups. Fill them into the chart and add some more information you know about it.

Culture and sport			

Do you understand the following expressions? Find them in the text and use them in sentences*: Hipotherapy, weight carrying, vaccination, team of horses, pregnancy, bedding, equipment, hipotourism.*

Find the following items in the text a say where and what are they used for?

Horse shoe, brush,, concentrate, straw, helmet, bridle, whip, horse trail, challet.

Název tematického celku: Energetické plodiny a jejich význam v současné době.
Energetic plants nad their function nowadays.

Anotace:
Materiál seznamuje s příklady energetických plodin, s významem jejich pěstování z hlediska péče o krajinu a z hlediska péče o životní prostředí. Dále se zabývá výhodami využívání bioenergie.

Klíčová slova:
Soil exploiting, wood waste, straw, flax, annual dock, reynoutria, poplar, willow, biofuels, job opportunities.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o energetických plodinách.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat příklady energetických plodin,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) vyhledá v textu odpovědi na otázky, s jejich využitím vede dialog na téma využití biomasy,
5) dokáže informovat o energetických plodinách a jejich významu z hlediska krajinářského, energetického a sociálního.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Kuchtík,F. Teksl, M. Valeš, J. *Speciální pěstování rostlin*. 1. vydání. Praha: Credit , 2002. ISBN 80-86392-00-7.
Voráček, J. *Zemědělská angličtina.*1. vydání. Praha: Profi Press, s.r.o., 2004. ISBN 80-86726-08-8.

Energetic plants and their function nowadays

Growing of energetic plants enables entirely new and non-traditional way of soil exploitation. This branch does not compete with the food market and it is important not only for agriculture by efficient exploitation of redundant land, but also for other branches:

- energetics - source of renewable energy
- environment - reducing of fossil fuels
- social sphere - creation of job opportunities

At present the fytoenergetics is preferable based on exploitation of ***agricultural by-products*** (*straw)* and ***forest and wood waste*** (*slivers, saw dust*).

Goal directed growing of energetic plants is then further posibility of agricultural activities.

Assortment of plants for energetic purposes

Following listing contains plants with high yield of dry mass. These sorts are grown for energetic purposes or for energetic purposes can be used straw or another by-product after main product separating.

Crops:

Wheat, rye, maize, rape, mustard, sunflower

Annual plants:

Canabis (konopí seté)

Amaranthus (laskavec)

Flax (len setý)

False flax (lnička setá)

Annual sunflower (slunečnice roční)

Fodder mallow (krmný sléz/sléz přeslenitý)

Perennial and persistant plants:

European prime rose (pupalka dvouletá)

White sweet flower (komonice bílá)

Jerusalem artychoke (topinambur hlíznatý)

Fodder dock (šťovík krmný)

Miscanthus / elephant grass (ozdobnice čínská/ čínská tráva)

Wild growing plants:

Reynoutria (křídlatka)

Energetic grasses

Ribbon grass (chrastice rákosovitá)

Tall fescue (kostřava rákosovitá)

Bentgrass (psineček velký)

Tall oat-grass (ovsík vyvýšený)

For energetic purposes there are many plants suitable, also decorative plants or wild herbs and grasses cultivated for seed. **Quickly growing woody plants,** e.g. *poplars, willows, elmtree, alder, lime, hazel, rowan* are very important source of bioenergy,

Assesment of energetic plants from the landscape viewpoint:

Plantations are water reservoirs, they are able to increase air humidity by the water evaporation, they can avoid drying up of landscape. Plants can catch and breake wind streams and entrap the dust. They provide natural shelter for organisms and increase natural diversity in the landscape.

Why to exploit the bioenergy?

The bioenergy does not contribute to climatic changes caused by greenhouse gases. Biofuels are based on inland and renewable sources, they are able to produce raw materials nearly permanently, delivery can be organized on regional base without any outdoor influences of international crises. The harvest, manipulation and exploitation of biofuels create new jobs opportunities for farmers, forest workers and workers in bioplants. It contributes to countryside development. It helps limit using of fossil fuels and improve the environment.

The number of plants cultivated for energetic purposes will surely be increased in the future.

soil exploitation - využití půdy

straw - sláma

saw dust - piliny

slivers - štěpka

annual - jednoletý

perennial - dvouletý

poplar - topol

willow - vrba

fuel - palivo

elmtree - jilm

alder - olše

lime - lípa

rowan - jeřáb

avoid - vyhnout se, zabránit

increase - zvětšit, stoupnout

evaporation - vypařování

contribute - přispívat

humidity - vlhkost

Suggestions how to practise the topic

Read the text and translate it.

Work in pairs. Read the text about energetic plants and complete the chart. Example:

Annual plants	Perennial plants	Grasses	Woody plants

Read the text carefully, find and write 5 reasons for growing and using energetic plants.

Answer the questions. Use the text.

1. Why is growing of energetic plants important for agriculture?
2. What other branches is growing of energetic plants important for? Why?
3. What agriculture by-product can you name?
4. Why is growing of energetic plants suitable for the landscape?
5. Why is growing and using plants for energetic purposes environment friendly?

Work in pairs. Use the previous questions in a dialogue.

Complete the sentences according the text. Use new vocabulary.

…….. is agriculture byproduct used in fytoenergetics.

Growing of energetic plants is a way of using ……..…….. land.

…… and …….. are forest and wood waste.

Plantages can ……. the air humidity by …….

The bioenergy does not …… to climatic changes.

Woody plants for energetic purpuses are ……..……

Growing of energetic plants can create new job …….…….

Do you understand the following expressions? Find them in the text and use them in sentences.

soil exploitation, job opportunities source of bioenergy natural shelter countryside development

Název tematického celku: Krajina a její složky - voda, půda, lesy, zeleň …
The landscape - water, land, forest, greenery …

Anotace:
Materiál se zabývá krajinou a jejími komponenty - seznamuje se slovní zásobou týkající se vodních ploch, půdy a lesa.

Klíčová slova:
Landscape, pond, lake, soil, fertilization, fertilizer, pollute, forest, tree, meadow, ground water.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o krajině a jejích složkách.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne slovní zásobu týkající se vodních ploch, půdy a lesa, jejich znečištění,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět,
5) dokáže informovat o půdě a jejím složení, úrodnosti, typech vodních ploch a významu lesa v krajině.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Voráček, Jaroslav. *Zemědělská angličtina.* 1. vydání .Profi Press, 2004. ISBN 80-86726-08-8.
Hájková, Jarmila a kol. *Anglicko-Český a Česko-Anglický slovník ekologie a životního prostředí*. 1.vydání. Fontána, 1998. ISBN 80-86179-11-7.

The landscape - water, land, forest

The landscape is made up from many parts. In the nature we can admire for example forests, fields, meadows, rivers, ponds, streams, lakes, seas, oceans, deserts or mountains. In the landscape we also find a rich generic variety of animals and plants, which live in a suitable part of the landscape and there they take nutrients and everything what they need for their life. All these living creatures are dependent not only on themselves, but also on the ecological system they live in. They live in connection and harmony together - we speak about biodiversity.

Water. On the Earth we can find water in many forms, it covers about 71% of the Earth's surface and without water the life on the Earth would be impossible. Water can be found in seas and oceans, in saltwater and freshwater lakes, in rivers, ponds and streams. The water forms icebergs, all living creatures, land and atmosphere also contain water in the form of water vapour. Water plays an important role in the landscape and it offers the living space of many organism and fish.

Today water is polluted in many ways. We fight against many forms of waterpollution - waste water from the factories, tanker accidents, oil spots in the seas and fertilizers leaking into the ground water from the agriculture. A serious problem is also the acid rain, which kills the plants, trees and whole forests.

Land. The upper part of the earth is called land or soil. There live a lot of organism and the soil is influenced by the environment very intensily. In the soil we can find anorganic minerals, organic humus, water and air. The soil is important for people, animals and especially for trees and plants, because in the soil there are nutrients and water which they need for their life. According to the amount of the nutrients we speak about the soil productivity. In case of an arable land, where people grow crops, nutrients must be supplied. This process is called fertilization. But a high amout of fertilizers can bring a problem - they pollute the soil. Transport, industry and landfills also pollute the soil.

According to the structure of the soil many types of soils can be distinguished. There are three basic types of soils. A soil with high content of nutrient is called ***humus or heavy soil***. A soil which contains a lot od clay is called an ***intermediate soil*** and the last type are soils with high content od sand. Such type is called ***light soil***.

Forest. It is an area, where a lot of trees are concetrated. It builds also an independent and complex ecological system. It is a place where animals, birds, insect, different types of plants, mushrooms, ferns, moss and flowers live. Forests are dependent on the number of precipitation in the differnt parts of the world. They also influence the climate, humidity of the air and the whole landscape. They are very important for us, because trees in the forests filter the carbon dioxide out to the oxygen. Forests also represent a place for relaxation and they are important for timber industry and forestry.

There are many types of forests worldwide. In our altitude we speak for example about primeval forests, riparian forests, mixed forests, deciduous forests and coniferous forests. A very special type of forest is the tropical rainforest.

field - pole

meadow - louka

stream - potok

nutrient - živina

freshwater - sladkovodní

iceberg - ledovec

water vapour - vodní pára

soil - půda

influence - ovlivňovat

productivity - produktivita

supply - dodávat

landfill - zavážka

distinguish - rozlišovat

content - obsah

clay - jíl, hlína

fern - kapradina

moss - mech, lišejník

precipitation - srážky

humidity - vlhkost

filter out - přeměnit

timber - dřevařský

primeval - prastarý

riparian - lužní

deciduous - listnatý

coniferous - jehličnatý

ground water - spodní voda

pollute - tnečišťovat

arable land - orná půda

Suggestions how to practice the topic

Read the text about the landscape and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. Why are forests important for us?
2. What types of soil do you know?

In pairs/small groups discuss the pollution of the landscape in your region!

Describe the picture, what is the idea of the picture?

http://www.pribramnamorave.cz/_uploads/obrazky/puvodni-web/zp2006093.jpg

Make sentences about the topic, use this vocabulary:

timber industry, latitude, water vapour, waterpollution

Match the vocabulary and the definition:

soil –	very old forest with any intervention of people
primaval forest –	soil with high content of nutrients
fern –	forest, which can be found near rivers and streams
heavy soil –	prehistoric plant gowing in forests
riparian forest -	the upper part of the Earth

Název tematického celku: Lesy a lesní společenstva.
Forests and forest life.

Anotace:
Materiál se zabývá lesem a životem v něm. Seznamuje se slovní zásobou tohoto tématu, s druhy stromů a zvěře žijící v lese. Zabývá se problematikou deštných pralesů.

Klíčová slova:
Tree, lime, maple, spruce, deciduous, conifers, rainforest, hare, deer, hedgehog.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o lesích.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat druhy stromů, jejich části a lesní zvěř,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět,
5) dokáže informovat o stromech, lese, zvěři, deštných pralesech, jejich funkci a negativních vlivech na ně.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Hájková, Jarmila a kol. *Anglicko-Český a Česko-Anglický slovník ekologie a životního prostředí*. 1. vydání. Fontána, 1998. ISBN 80-86179-11-7.
Voráček, Jaroslav. *Zemědělská angličtina*. 1. vydání. Praha: Profi Press, 2004. ISBN 80-86726-08-8

Forests and forest life

A forest is an area with high density of trees. Tree forests cover approximately 9,4 percent of the Earth's surface or 30 percent of total land area. But in the history they covered about 50 percent of the land area. Forests were always important for people and till today they have a lot of functions. It is for example:

- **a source of timber** - timber is a valuable renewable raw material used in building, paper industry, furniture production etc.
- **„the lungs of the Earth"** - forests are an important source of oxygen, they also absorb dust and remove noxious substances from the air
- **climate stabilizer** - forests are resistant to the wind, they build specific microclimate, which reduces the extremes in temperature
- **flood control** - forest can absorb a lot of water thanks to the moss growing there
- **soil erosioin control** - forests are important especially in the mountains, because they lower the number of soil which is washed away in heavy rains
- **a place of relaxation** - forests have good influence on our mind

There are many types of forests worldwide. The main types of forests are tropical rainforests, deciduous forests and coniferous forests.

Tropical rainforests. It is a ecosystem with high avarage temperature and a significant amount of rainfall. We can find them in Asia, Australia, Africa, South America, Central America, Mexico and on many of the islands in Pacific, Carribean and Indian Ocean. Standard monhly temperatures exceed 18˚C during all months of the year and the average annual rainfall lies between 175 and 200 cm. There is a high level of biodiversity in the rainforest - half of all living animal and plant species on the planet have their home in the rainforests. Tropical rainforests have been called „the world's largerst pharmacy", because over one quather of natural medicines can be found there. They take also a major role in reducing atmospheric carbon dioxide, because they transform it into oxygen. That is why they are called „the lungs of the Earth".

Deciduous forests. These are forests where more than 75% of the forest is formed by deciduous trees. These forests are typical for the temperate climate zone where four seasons - spring, summer, autumn and winter change. Trees which can be find in deciduous forests are: beech,

oak, ash, elm, hornbeam, lime, maple and alder. There live also a lot of animals. Typical are marten, red deer, roedeer, beaver, hare, fox and wolf.

Coniferous forests. These are forests, where coniferous trees predominate (75 - 90% of the trees are conifers). They can be natural, but very often people plant man-made monocultural forests. They are typical for North America and the North of Europe and Asia. In the Czech republic we can find them at altitude between 1000 -1400 meters. In these forests we can find lichens and mosses, heather, cranberries and blueberries. There aren't many sorts of trees in these forests. Spruce, larch, fir and pine grow there. A typical animal living in these forests is a bear. Next animals living here are elk, reindeer, fox, lynx, deer and hare.

beech - buk

oak - dub

ash - jasan

elm - jilm

hornbeam - habr

alder - olše

marten - kuna

red deer - jelen

roedeer - srnec

beaver - bobr

hare - zajíc

altitude - nadmořská výška

lichen - lišejník

moss - mech

heather - vřes

spruce - smrk

larch - modřín

pine - borovice

fir - jedle

elk - los

reindeer - sob

lynx - rys

timber - stavební dřevo

predominant - převažovat

valuable - cenný

renewable - obnovitelný

dust - prach

exceed - překonat

lime - lípa

maple - javor

Suggestions how to practice the topic

Read the text and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. What function does the forest have?
2. What animals are typical for coniferous forest?
3. Can you mention three sorts of deciduous trees?

Make sentences about the topic, use this vocabulary:

forest, conifers, rainforest, deciduous tree

Choose one type of the forests described in the text and speak about it!

Devide the trees in two categories!

Deciduous trees	Coniferous trees

elm, beech, spruce, larch, oak, ash, hornbeam, lime, fir, pine, maple, alder

Find a word which is described by the definition, make another definitons!

an area with high density of trees =

evergreen trees =

valuable renewable raw material won from the forest =

an ecosystem with high temperature and a lot of rainfall =

In pairs / small groups discuss the functions of the forest!

Translate, if necessary, use a dictionary!

kořen, kmen, kůra, koruna, větev, větvička, list, květ, poupě, jehličí

Název tematického celku: Produkce ovoce a zeleniny.
Fruit and vegetables production.

Anotace:
Materiál představuje běžné druhy zeleniny a ovoce pěstované v našich podmínkách, rozdělení do skupin, jejich význam pro zdravou výživu a základní postupy při jejich pěstování.

Klíčová slova:
Nutrition value, vegetable categories, root vegetable, legumes, contain, diet, fibre, carrot, parsley, apple, pear.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o produkci a ovoce a zeleniny.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat běžné druhy ovoce a zeleniny a rozdělit je do skupin,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na téma zdravá výživa,
5) dokáže informovat o pěstování a zpracování ovoce a zeleniny.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Ivičič, L. *Ovocnictví*. 1. vydání. Praha: Státní zemědělské nakladatelství, 1985.
Voráček, J. Zemědělská angličtina. 1. vydání. Praha: ProfiPress, s.r.o. 2004. ISBN 80-86726-0808.

Fruit and vegetables production

Fruit and vegetables are very important parts of our nutrition. We eat them almost every day.

Vegetables

Vegetable is a plant or its part used for cooking or eating raw. Vegetables are often consumed as salads or cooked in dishes.

Vegetables have great nutrition value. They contain different vitamins, minerals and carbohydrates. They are important sources of fibre - for digestion. They contain important nutrients necessary for healthy hair and skin as well.

Vegetables are usually divided into the following categories:

1. *Cabbage stalk vegetable* (košťálová zelenina)

- cauliflower, cabbage, savoy cabbage, Brussels sprouts, kohlrabi, broccoli

Cabbage stalk vegetables contain big amount of calcium, vitamins A,B,C, affect against cancer.

2. *Root vegetable* (kořenová zelenina)

- carrot, parsley, parsnip, beetroot, turnip, celeriac, radish, horse radish

Root vegetables are suitable for eating raw.

3. *Leafy green vegetables* (listová zelenina)

- lettuce - various kinds, chicory, spinach, Chinese cabbage, fennel

Leafy green vegetables are suitable for salads, contain folic acid.

4. *Stem vegetable* (stonková zelenina)

- rhubarb, asparagus.

5. *Onion vegetable* (cibulová zelenina)

- onion, shallot, garlic, leek, chive

Onion vegetables promote digestion, help at a cold, act antibacterial.

6. *Fruiting vegetable* (plodová zelenina)

- tomato, pepper, aubergine, cucumber, pumpkin, artichoke, melon, courgette

Fruiting vegetables have high nutrition value, high content of vitamin C, help reduce blood pressure and cholesterol.

7. *Legumes* (lusková zelenina)

- peas, beans

They contain carbohydrates, proteins, fat, fibre, vitamins B, C. Almost all kinds of vegetables are suitable for canning and freezing.

Fruit

Fruits are usually sweet and used for eating raw. Fruits are an important source of vitamins. They contain mostly water and carbohydrates. Fruits are usually divided into two categories - *temperate zone fruits* and *tropical and subtropical fruits.* Temperate zone fruits are grown in our country. There are following groups of them:

1. *Seed fruit* (jádrové ovoce)

- apple, pear

Seed fruit (pomaceous) is very expanded. It is not very demanding. These kinds stay fresh for a long time, so they can be stored easily.

2. *Stone fruit* (peckové ovoce)

- plum, cherry, sour cherry, apricot, peach

Stone fruit (drupaceous) do not ripe after harvesting. It has short durability.

3. *Berry fruit* (bobulové ovoce)

- grape, currant, gooseberry, blueberry, cranberry, raspberry, blackberry, strawberry, rose-hip, rowan

Berry fruit has short durability and wide using. It has high biological value a high content of fibre.

4. *Shell fruit* (skořápkové ovoce)

- walnut, hazelnut, chestnut, almonds

Shell fruit can be eaten raw or it is often used in food industry.

Another category of fruit is tropical and subtropical fruit. That is e.g. lemon, lime, orange, grapefruit, avocado, pineapple, banana, mango.

Diets containing some amounts of fruit and vegetables may help lower the risk of heart diseases, diabetes, they may also protect against some cancers.

People in our country grow fruit and vegetables in their gardens, they have mostly apple, pear and plum trees In the gardens you can see strawberry patches, currant and gooseberry bushes. People like domestic growing of cucumbers, peppers or tomatoes in greenhouses. Almost every house in the country is surrounded by a garden with fruit and vegetables.

nutrition value - výživná hodnota
carbohydrates - sacharidy
folic acid - kyselina listová
fibre - vlákno,vláknina
contain - obsahovat
digestion - zažívání
durability - trvanlivost
greenhouse - skleník

Suggestions how to practise the topic:

Read the text aloud.

Work with dictionary: Find the meaning of the kinds of fruit and vegetables you do not know. Translate the text.

Answer the questions:

1. Why is eating vegetables so important for our health?
2. What categories are vegetables divided into?
3. What does fruit mostly contain?
4. Can you name any groups of fruit and examples of fruit belonging to them?
5. Do you grow any fruit or vegetables at home? If yes, which ones?
6. What is your favourite kind of fruit or vegetables?

Fill in the chart about fruits:

Seed fruit	*Stone fruit*	*Berry fruit*	*Shell fruit*	*Tropical fruit*

Fill in the chart about vegetables:

Stalk veg.	*Leafy veg.*	*Root veg.*	*Stem veg.*	*Onion veg.*	*Fruiting v.*	*Legumes*

Work in pairs. Make questions about fruit and vegetables. Then ask your classmates.
(For example: What vegetables do you need to prepare tomato salad?)

What is it? Find the names of fruit or vegetables:
cfowaulewir, leutcte, gpare, paer, swbertary, pulm, apsrgaaus, crraot, tamtoo, grlaic, pmkapin

Work in the garden. Do you know those expressions? If not, use dictionary or ask your teacher. Use them in sentences about work in the garden:
prepare the patch, dig the soil, sow seeds, do weeding, water plants, pick fruit, mow grass, prune trees, rake leaves, spread manure

Do you like eating vegetables? Write a recipe for simple vegetable dish.

Název tematického celku: Rybníkářství a chov ryb.
Fish farming

Anotace:
Materiál představuje stručnou historii rybníkářství u nás. Dále se zabývá způsobem chovu ryb v Jižních Čechách, pojmenovává druhy ryb, popisuje cestu ryby ke spotřebiteli.

Klíčová slova:
Pond, carp, pike, catfish, gill, hatchery, scales,fin, stripping, sack fry, plankton, unsaturated fatty acids, nourishment

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o rybníkářství a chovu ryb.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat druhy sladkovodních ryb,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu chovu ryb a dokáže je zodpovědět,
5) dokáže stručně informovat o historii rybníkářství, chovu ryb v Jižních Čechách a významu rybího masa ve výživě.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Malíková, A. *Slovník česko - anglický, anglicko - český odborných výrazů z oblasti ekologie vodního prostředí, vodního hospodářství a rybářství.* ISBN 978-80-87096-08-6.
Chov ryb. Rybníkářství (www. dokument). Dostupné z: http://www.trebon.rybarství.cz.
Rybníkářství (www.dokument). Dostupné z: http://cs.wikipedia.org.

Fish farming.

Fish farming is one of the oldest human occupation. It has always been a source of getting food. Fish was considerable component of a diet of our ancestors. Nowadays it represents an important part of agriculture. It is typical for central and eastern Europe.

There are more than 24 thousand ponds and reservoirs in the Czech Republic,with the total area of 52 thousand hectares, of which 42 thousand hectares of ponds are used in Bohemia and Moravia to farm fish. The production of fish for the market has long been around 20,000 tons.

The main task of the ponds is fish production but they also have a lot of other functions for the landscape treatment, e.g. retention of water, flood defence, biological water treatment, they play recreation role, they provide areas for bird nests and safe territories for animals, so they contribute to keeping biodiversity.

History of ponds and fish farming.Traditional fish farming areas in the Czech Republic are in South Bohemia. Fish farming in the area Třeboňsko can boast a long tradition which exceeds seven centuries and it is connected with the names of several outstanding Czech pond builders. The most famous are Štěpánek Netolický and Jakub Krčín.

The first ponds were built in the second half of the 14 century, there were about 20 of them. Later the development of fish farming is connected with the nobel family Rožmberk and their pond builder Štěpánek Netolický. At the beginning of 16 century he built the channel „Zlatá stoka“ as a source of water for the new ponds from the river Lužnice. In the second half of 16 century Jakub Krčín carried on his work and built many other ponds, e.g. the pond Rožmberk which is the largest one in the Czech Republic.

Fish farming in South Bohemia. The biggest producer of fish in the Czech Rebublic is the company Rybářství Třeboň. It produces about 2,500 - 2,700 tons of fish every year. The most common kind is carp - it represents 95 % of the whole production. Other kinds are: tench, pikeperch, pike, catfish, grass carp, perch, silver carp.

Carp breed. The carp grows for 3 - 4 years. The breed is based on natural food, the method of stripping is used for reproduction.

The production cycle begins in a hatchery where stripping is made and then sack fry is released into small ponds and after some time into bigger ponds. There they grow until the age of three or four years. Carps have quite pleasant living conditions, each carp has 20 metres of water

area. They feed on natural food - plankton, insect larvae and they got some wheat as supplemental feed.

The market-size fish is from 1.2 kg - 3.2 kg. Fish meat has a positive effect on the health of the human organism. It is of high quality, dietetic, it has high nutrition value. Fish fat is an important source of unsaturated fatty acids. It has high content of vitamins and minerals.

The carp body. Typical feature of the carp body are gold scales and a long back fin. It uses gills for breathing.

From the pond to the table. Ponds are usually harvested in the autumn. Fish is prepared for Christmas market. Fish is taken to holding ponds. They spend almost two months there.Water is colder and fish stops to get food and moves slowly. There is running cold water all the time, so fish meat gets rid of mud smell. The water has to contain enough of oxygen. Then fish is transported to the shops. The loading must follow the strickt rules, so the transport doesn´t influence the quality of meat.

Although everybody knows that fish meat is beneficial to our health, people in our country do not eat fish very often. Most of families have fish only at Christmas but in Europe people have fish at least once a week. In connection with a healthy lifestyle regular eating fish meat should play an important role in nourishment.

considerable - významný
ancestor - předek
landscape treatment - péče o krajinu
retention of water - zadržování vody
nest - hnízdo
outstanding - vynikající
tench - lín
pikeperch - candát
pike - štika
catfish - sumec
grass carp - amur
silver carp - tolstolobik
get rid - zbavit se
flood defence - ochrana před povodněmi
stripping - umělý výtěr
hatchery - líheň
sack fry - plůdek
insect larvae - larvy hmyzu
supplemental - doplňkový
unsaturated - nenasycený
fatty acid - mastná kyselina
nutrition value - výživná hodnota
scales - šupiny
fin - ploutev
gills - žábry
holding pond - sádka
oxygen - kyslík
nourishment - strava, výživa

Suggestions how to practise the topic:

Read the text and translate it.

Check that you understand the text by answering the following questions:

1. What is the main task of the ponds?
2. What other functions do the ponds have?
3. When the first ponds were built in South Bohemia and what names are they connected with?
4. How many kinds of fresh water fish can you name?
5. Can you describe the productin cycle of the carp?

Work in pairs. Make some other questions about the text and use them in a dialogue.

Fill in the gaps with a suitable word from the text.

Fish was ……. component of a diet of our …… .

Landscape …… is a very important function of ponds.

Ponds provide areas for bird ……..... .

The production cycle of the carp begins in a …… .

Typical features of the carp body are ……. and ……. .

Can you add more sentences to fill in? Write them down.

Do you understand the following expressions? Use them in sentences.

our ancestors´diet, fish production, the method of stripping, nutrition value,
unsaturated fatty acids, get rid of mud smell, gold scales, gills

What is the text about? Summarize three main parts of the text. Write down at least three sentences about

- history of ponds in South Bohemia
- fish farming and carp breed in Rybářství Třeboň
- importance of fish meat in nourishment

Do you like fish? How often do you eat fish? Work in pairs and try to create a simple fish recipe for you family.

Název tematického celku: Ochrana přírody a krajiny.
Nature and landscape conservation.

Anotace:
Materiál uvádí některé chráněné krajinné oblasti a národní parky v České republice a stručně je charakterizuje.

Klíčová slova:
Peat, peatbog, game park, national park, preserve, marsh, exploitation, moss, amphibian, bog plants, virgin forest.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o ochraně přírody a krajiny.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat typy chráněných oblastí jako možnost ochrany tamní flóry a fauny,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět,
5) dokáže informovat o naučné stezce Borkovická Blata.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
www.trebonsko.cz/borkovicka-blata
Bumerl, J. a kol.: *Borkovická Blata*. 1. vydání. PRIMA Tábor, 1999.
Hájková, Jarmila a kol. *Anglicko-Český a Česko-Anglický slovník ekologie a životního prostředí*. 1. vydání. Fontána, 1998. ISBN 80-86179-11-7.

Nature and landscape conservation - protected areas, national parks, nature reserves

The first protected areas in the area of current Czech republic come from 1838. In this year the first two protected areas were declared. Nowadays in our republic valuable areas are divided into many categories.

National park is a large area of special protection. In Czech republic there are four national parks. The oldest one is National Park Giant Mountains (KRNAP) - declared in 1963, the largest one is National Park Šumava - the total area 69 030 ha.

Protected landscape area is a large area with valuable nature ecosystem. There are 25 protected landscape areas (CHKO) with total area about 1 million hectares in the Czech Republic nowadays. The most famous are protected landscape areas of Český ráj, Moravský kras or Český kras.

Nature reserve is a small area of protected nature. Unique ecosystems and endangered animals and plants live there. The oldest nature resereve in the Czech Republic is the virgin forest Boubín. Nowadays there are more than 800 nature reserves in our republic.

Some more types of nature protection are common in the Czech Republic. These are smaller areas of less importance. These are for example **Special Protection Areas** (Ptačí oblast) or **memorable trees**.

A system of protected areas throughout the whole European Union is called **Natura 2000**. It protects the rare and the most endangered kinds of animals, plants and nature sites. More than 250 nature sites, 200 animals, 400 plants and 180 birds can be found in this system.

In the region of South Bohemia, there are a lot of areas, where nature and landscape is protected. One of them is the nature reserve Borkovická Blata, which is the closest to our school. This nature reserve lies in the north part of Třeboň region, about 30 kilometers away from Tábor. It was declared as a nature reserve in 1980.

The peat bog of Borkovice started to develop about 10 000 years ago. Nature in this area developed in atypical conditions - in a wet area with swamps and sloughs. Only bog plants luxuriated here, such as mosses, reed, rush or sedge. Rests of these plants could not decay fast and therefore peat was formed. During the years a layer of peat was formed, which had a depth

up to 8 meters. From the 19th century peat was exploited here - at first manualy, later in the 20th century by machines. After drying, peat was used for heating.

In 1980 a path through the nature reserve was opened - students of our school helped to build this path. It is about 5,5 kilometers long and at 31 stations tourist learn about the plants and animals of this area and about peat exploitation. The plants typical for this area are sundew, bladderwort, mossberry, wild rosemary, bilberry and wood ferm. Not a lot of animals live in this area. From the birds bee bird, european nightjar or cuckoo can be seen here. Water frog, spadefoot or tree-frog are the representatives of amphibians. Also many butterfly species and owlet moths live here.

conservation - ochrana

protect - chránit

nature reserve - přírodní rezervace

current - současný

endangered - ohrožený

virgin forest - prales

rare - vzácný

nature site - chráněná krajinná oblast

peat - rašelina

peat bog - rašeliniště

swamp - bažina

slough - močál

bog plants - bažinné rostliny

luxuriate - vzkvétat, dařit se

moss - mech

reed - rákos

decay - rozkládat se

exploit - těžit

sundew - rosnatka

bladderwort - bublinatka

mossberry - klikva

wild rosemary - rojovník

bilberry - brusnice

fern - kapradina

bee bird - budníček

nightjar - lelek

spadefoot - blatnice

tree frog - rosnička

water frog - skokan

amphibians - obojživelník

owlet moth - můra

sedge - ostřice

Suggestions how to practice the topic

Read the text and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. When was the first pretected area in the Czech republic declared?
2. What are the types of protected areas in the Czech republic?
3. How do we call the system of protected areas in Europe?

A group of foreign students visited our school. Give them some information about the area of Borkovická Blata!

Make sentences about the topic, use this vocabulary:

virgin forest, peat, nature reserve

Choose one type of protected area and describe it!

Write a definition for this vocabulary:

peat –

bog plants –

decay –

endangered –

Find some examples of endangered plants and animals living in the Czech republic!

Complete the chart. Then make sentences with six of the words you wrote!

Verb	Noun	Adjective
	protection	
conserve		
		exploited

Název tematického celku: Přírodní a historické zvláštnosti Táborska.
Nature and historical curiosities of Tábor surroundings.

Anotace:
Materiál seznamuje s historickým centrem Tábora a jeho stručnou historií, dále se zaměřuje na zajímavé přírodní lokality v okolí Tábora, např. na naučnou stezku Borkovická Blata a na Chýnovskou jeskyni.

Klíčová slova:
Municipal monument reservation, underground corridors, dean´s church, cave, limestone, castle ruin, hussite movement, winter habitat, pilgrimage church, rock boulder.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o přírodních a historických zvláštnostech Táborska.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zná výrazy pro popis historického centra města, jeho husitské historie a přírodního okolí města Tábora,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na dané téma,
5) dokáže stručně informovat o historii města a o přírodních zajímavostech v jeho okolí.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Kolektiv autorů. Tábor. 1. vydání. Praha: Milpo Media, 2001.ISBN 80-86098-18-4

Nature and histirocal couriosities of Tábor surroundings

Tábor is a wonderful town about 60 km away from České Budějovice. The population of the town is about 40 000. It is the second largest town in South Bohemia. A lot of tourist come there to visit its historical centre.

The town grew on the site of former settlement called Hradiště, which existed in the 13th century. In the 14th century a castle Hradiště was built there. In 1420 the Hussite town Tábor was founded there. Tábor is a biblical name. It took its name from a mountain in Palestine. Tábor was a centre of Hussite movement. One of its main leaders was Jan Žižka. At first he tried do create a new, just, classless society - the community of brothers and sisters that lives in harmony with God's Commandments and with communal ownership. After 16 years of Hussite wars, in 1437, Tábor became a royal town.

The centre of the town keeps its old character. The core of Tábor is a municipal monument reservation. In the square you can visit the statue of Jan Žižka. Under all the houses in the square there are underground corridors and cellars. They helped to save people and their property in times of war and fires. Other important buildings in the square are the Dean's Church of Trasfiguration on mount Tábor in late Gothic style with Renaissance and Baroque aspects and The original Town Hall - now the Hussite Museum. It is a late-Gothic building with an amazing Gothic hall inside.

In the old part of the town you can also visit Kotnov and Bechyňská Gate. Kotnov is a tower which remains of the castle Hradiště from the first half of the 13th century. It is a lookout tower with beautiful views of Tábor and the surrounding country. Bechyňská Gate comes from the 15th century. It is the last well-preserved gate of the Hussite fortification of the town.

Along the banks of the river Lužnice there is a part called „Koželuhy". The houses there are famous for their folk character. As the name says, raw leather was processed here. Near the river you can also visit the Garnet Cliff. It is a huge rock boulder, in which dark-coloured Czech garnets were placed in the form of crystals or grains.

Jordán is a dam built in 1492. It was named after the biblical river Jordán in Palestine. This oldest dam in Europe was used to supply drinking water. The water area is 52 hectares and the maximum depth is 18 meters.

The monastery and pilgrimage church in Klokoty is a Baroque building from the first half of 18th century.

Chýnovská cave is a beautiful limestone cave about 10 kilometers away from Tábor. It was the first cave in the Czech republic, which was opened for public in 1868. A lot of tourist visit the 260 meters long tour through the cave and a lot of bats have their winter habitat in the cave.

Kozí Hrádek is a castle ruin about 6 kilometers away from Tábor. The famous Czech reformer Jan Hus lived and worked there between 1413 and 1414.

statue - socha

ruin - zřícenina

limestone - vápenec

cave - jeskyně

bat - netopýr

winter habitat - zimoviště

settlement - osada

just - spravedlivý

God's commandments - Boží přikázání

property - majetek

fortification - opevnění

monastery - klášter

pilgrimage - poutní

dam - přehrada

supply - zásobovat

remain - zbývat

depth - hloubka

boulder - balvan

garnet - granát

grain -zrno

lookout tower - rozhledna

core - jádro

folk - lidový

process - zpracovávat

trasfiguration - proměnění

former - dřívější

on site - na místě

classless - beztřídní

ownership - vlastnictví

boulder - balvan

municipal monument reservation - městská památková rezervace

underground corridors - podzemní chodby

Suggestions how to practice the topic

Read the text about the landscape and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. What do you know about Kozí Hrádek?
2. What do you know about the name of the town?

In pairs prepare a short speeking about the history of the town for a goup of foreign students, who came to your school!

Complete the text!

Tábor grew on the site of a former .....called Hradiště, which existed in the 13 century. In the 14 century a ..... was built there. In 1420 the ..... town Tábor was founded there. Tábor is a biblical name. It took its name from a mountain in Palestine. Tábor was the centre of Hussite ..... . One of its main ..... was Jan Žižka. At first he tried to create a new, just, ... society - the community od brothers and sisters that lives in harmony with God's ..... and with communal ..... . After 16 years of Hussite ....., in 1437, Tábor became a ..... town.

Describe the pictures! What sights can you see?

http://commons.wikimedia.org/wiki/File:Granatova_skala_in_Tabor_in_summer_2011_(5).JPG,http://cs.wikipedia.org/wiki/Koz%C3%AD_Hr%C3%A1dek#mediaviewer/File:Kozi_Hradek_2005-3.jpg

Název tematického celku: Jak se žije ve městě a na venkově.
Life in the city and in the country.

Anotace:
Materiál seznamuje se slovní zásobou charakterizující život ve městě a život na venkově. Pojmenovává výhody a nevýhody obou těchto lokalit.

Klíčová slova:
urban area, rural area, in the suburb, terraced house, detached house, traffic jam, vandalism, village, barn, shed, commute, privacy, countryside, cottage

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o životě ve městě a na venkově.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zná slovní zásobu charakterizující život ve městě a na venkově,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na téma výhody a nevýhody života v obou těchto lokalitách,
5) dokáže porovnat způsob života ve městě a na vesnici.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
McCarthy, M., O´Dell, F. *English Vocabulary in Use.* 5. vydání. Cambridge: CUP, 1994. ISBN 0 521 523961.
Redman, S. *English Vocabulary in Use*. 12. vydání. Cambridge: CUP 2003. ISBN 978-521-61465-8.

Life in the city, life in the country

Life in the town or city. It is *an urban area*. People can choose various possibilities where to stay in the town. Many people live in a flat. There are usually several flats in a *block of flats*. In the Czech Republic almost every town has *a housing estate*, which consists of blocks of flats, also called "prefabs". They are usually situated in *the suburb* of the town. People can live in blocks of flats in the centre of the town, in *terraced houses* - they are joined to several houses and form a row. Single people often choose *a bedsit*, that is a living room and a bedroom all in one. There are some parts of the town where you can find *detached houses* or *villas*, usually with gardens. The gardens have nice lawns, a lot of flowers and they have a swimming pool very often. Towns can be convenient places to live in because they have many facilities for various activities:

Sports: fitness centre, swimming pool, ice stadium, skating rink, tennis courts, football pitch;
Culture: theatre, cinema, youth club, art gallery, concert hall, museum, library;
Catering and night-life: restaurant, café, pub, nightclub, youth hostel, hotel, disco, take-away;
Other: shopping centre, commercial centre (area with lots of banks and offices), car park.
Typical buildings for very big cities are *skyscrapers*. In the suburbs there are industrial areas with *factories.*

Towns also have their own special problems, e.g. *traffic jams*, particularly in *rush hours* when the streets get *packed with* traffic, the travel is very slow. This is stressful for *commuters,* people who travel to work. They can catch *a bus* or *a tram*, use *underground* or take a *taxi.* Sometimes they can *get stuck* in the traffic jam. Other problems of big towns is *vandalism* and *crime.* People are more aggressive, the streets are often dirty, noisy and sometimes dangerous. The air is polluted.

The best thing about living in the city is that there is a good nightlife (bars, discos, cinemas), there is a wide range of shops, there are lots of cultural activities (museums, art exhibitions, concerts, films). The towns are cosmopolitan, there are people from many different countries and cultures. Last but not least there are more job opportunities, it is easier to find work.

Life in the country. It is *a rural area*. People usually live in a village, the typical village house is called a cottage. Many people build new houses as well, e.g. *bungalows* - it is a single floor family house. The house in the village always has a garden.You can find a *vegetable patch* there, where people grow carrots, garlic, onions or potatoes.

There are also *greenhouses* with cucumbers, tomatoes and peppers. You can see fruit trees in the garden - the most common are apple trees, pear trees, plum trees, somewhere also apricot and peach trees. The nicest part of the garden is created by *flower beds* and bushes.

The typical countryside is a *remote* area with woods and *forests, meadows, pastures, fields, country roads and footpaths, hills, valleys, brooks and streams, rivers, ponds and lakes*. In the village you can usually find a church, a school and a farm. The farm consists of *a farmhouse*, where the farmer family live, then *a barn*, some *sheds* with agriculture machines, *a cowshed* or a *pigsty.*

Life in the country is slower and more relaxed than in the city. People are more connected with nature and they devote their free time to some hobbies like gardening, keeping domestic animals, especially hens, rabbits, sometimes goats and bees. You can see *bee hives* in the gardens very often. The best thing about living in the country is that you get peace and quiet, you get fresh air, you are surrounded by beautiful scenery and you can walk in the countryside.

Life in the country has some negatives as well, e.g. there is not much nightlife. Especially young people have to travel to the town for entertainment and public transport is problematic. There is usually no medical care, you have to commute to school, to work. You do not get many shops there. There is also not much privacy because in the small village everybody knows you and everybody knows what you are doing.

People in the country live more environment-friendly. All their kitchen garbage is composted, they use wood or biomass for heating. They live in nature and they try to protect it.

urban area - městská oblast
housing estate - sídliště
in the suburb - na okraji
terraced house - řadový dům
bedsit - garsoniéra
lawn - trávník
pitch - hřiště
traffic jam - dopravní zácpa
polluted - znečištěný
opportunity - příležitost

rural area - venkovská oblast
cottage - chalupa
vegetable patch - zeleninový záhon
flower bed - květinový záhon
bush - keř
barn - stodola
shed - kůlna, hospodářské stavení
bee hive - včelí úl
commute - dojíždět
privacy - soukromí

Suggestions how to practise the topic:

Read the text and translate it.

Check that you understand the text by answering the following questions:

1. What types of housing do people in towns usually live in?
2. Explain the difference between a detached house and a terraced house.
3. What facilities for sports and culture do towns provide?
4. What entertainment possibilities do you have in the town?
5. What do traffic jam, rush hour, vandalism, cosmopolitan mean? Explain. Use your own words.

Work in pairs. Make similar questions about life in the country.

Use the questions in a dialogue with your neighbour.

Look at the list of facilities of the town in the text. Tick all those which your town, or any town you know well, has.

Fill the gaps with a suitable word.

1. Another word for the "country" is the .....

2. The opposite of an "urban area" is .....

3. Many blocks of flat altogether are called .....

4. A ..... is a typical house in the village.

5. The typical countryside is formed by .....

Can you add more sentences to fill in?

Which facilities would your ideal town have? Name three most important facilities for you in each of the categories listed in the text.

Here are some adjectives. Which of them would you use for describing a town and a village? Make two columns: *hectic, dangerous, quiet, crowded, expensive, safe, friendly, cosmopolitan, clean, ecological.* **Use them in phrases.**

Work in pairs. Discuss advantages and disadvantages of living in the country and in the town. Where would you like to live?

Název tematického celku: Technika v zemědělské výrobě.
Agricultural mechanization.

Anotace:
Materiál uvádí příklady názvů zemědělských strojů používaných v rostlinné i živočišné výrobě pro jednotlivé zemědělské činnosti.

Klíčová slova:
Milking machine, tractor, combine harvester, seeder, plough, sprayer, harrows, trailor, baler, cultivator.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o technice v zemědělské výrobě.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne vyjmenovat zemědělské stroje v živočišné i rostlinné výrobě,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu zemědělská technika a dokáže je zodpovědět,
5) dokáže informovat o účelu zemědělské techniky v rostlinné a živočišné výrobě.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Voráček, Jaroslav. *Zemědělská angličtina.* 1. vydání. Praha: Profi Press, 2004. ISBN 80-86726-08-8.

Agriculture mechanization

The word agriculture mechanization describes all machines nad instruments, which are used in the agriculture. In ancient times farmers had to do everything on their own, many people had to work in the agriculture to do all the work. This situation lasted till 1950s. Grain spikes were cut by a sickle or a scythe. Sheafs were made and placed in the field. Horses and oxes helped a lot in the agriculture but also in the forestry. They hauled ploughs in the fields and heavy farm trailers in the roads.

In the last 50 years agriculture experienced a big expansion. A lot of machines as for example tractor, combine harvester, or milking machine made the work of farmers easier. With less work farmers can breed more cattle and they can farm in fields of larger area.

The fields have to be prepared before seeding the grains. The soil is loosened and mixed by a plough or a soil cultivator. Later farmers use harrows to strike the soil. In the next step the drill seeder sows the seeds equally in the field. If the grains are grown, a combine harvester harvest them. Combine harvestor cuts the grain culms, it removes the grains from spikes and separates the grains and the straw. Grains stay in the grain tank and straw in the field. Later grains are reloaded from the grain tank and on a trailor transported to the silo. A baler makes straw bales from the straw in the fields.

For potatoe harvesting farmers use complete potatoe harvester. It is a special machine, which takes the potatoe plant from the soil and cuts the leaves from the tubers.

All modern machines - tractors, sprayers, dril seeders or combine harvestors have a system of satellite navigation, which makes their work automatical.

The most important machines used in agriculture are for example tractor, combine harvestor, plough, harrows, drill seeder, planting machine or sprayer.

Combine harvester is an agriculture machine used for harvesting of grain crops especially grains, rape, sunflowers, beans or grasses.

A plough has more functions: soil aeration, equal manure inpolughing, mechanical weed control or preparation of the soil before sowing.

Tractor is a machine, which is used to pull a traction of other agriculture machines. Tractors are used not only in agriculture, but also in forestry or gardening.

Harrow is an agriculture machine with tips, which are moved by the soil. Harrows have to loosen the soil, crush the clods, prepare the soil for sowing and weed controlling.

A **sprayer** doses manure and fertilizers and sprays them equal in the field.

Drill seeder is used to sow the seeds of the plants.

ancient - dávný

spike - klas

sickle - srp

scythe - kosa

sheaf - snop

ox - vůl

forestry - lesnictví

haul - vléct, táhnout

plough - pluh

strike - zarovnat

drill seeder - sečka

equally - rovnoměrně

straw - sláma

grain tank - zásobník na zrno

reload - přeložit

baler - balíkovač

straw bale - balík slámy

complete potatoe harvestor -kombajn na slikeň brambor

trailer - přívěsný vůz

tractor - traktor

combine harvestor - kombajn

milking machine - dojící stroj

breed - chovat

cattle - dobytek

seed - sít

sow - sít

loosen - uvolnit

harrows - brány

tuber - hlíza

planting machine - sázecí stroj

grain crops - obilniny

soil aeration - provzdušňování půdy

manure inploughing - zaorávání hnoje

weed control - hubení plevelů

clod - hrouda, drn

traction - tah, trakce

tip - hrot

dose - dávkovat

Suggestions how to practice the topic

Read the text and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

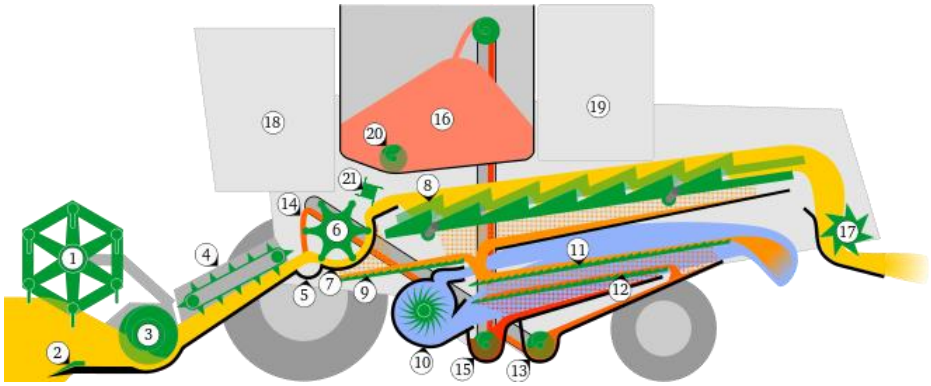
1. What functions does the plough have?
2. What machine is used for potatoe harvesting?

In pairs discuss the agriculture work now and in the ancient times!

Match the machine and the activity!

baler	grain harvesting
complete potatoe harvestor	sowing seeds
drill seeder	weed control
plough	making straw bales
combine harvestor	potatoe harvesting

Label the parts of a combine harvester, use the dictionary if necessary!



Reel	*Concave*	*Tailings conveyor*
Cutter bar	*Straw walker*	*Rethreshing of tailings*
Header auger	*Grain pan*	*Grain auger*
Grain conveyor	*Fan*	*Grain tank*
Stone trap	*Top adjustable sieve*	*Straw chopper*
Threshing drum	*Bottom sieve*	*Driver's cab*

Název tematického celku: Zoologické zahrady a obory a jejich poslání v současné době. Zoological gardens and game parks and their current function.

Anotace:
Materiál seznamuje se slovní zásobou exotických zvířat chovaných v zoologických zahradách, jejich krmením a péčí o ně. Zamýšlí se nad významem zoologických zahrad v současné době. Uvádí konkrétní příklad zoologické zahrady Větrovy.

Klíčová slova:
Bear,lion, parrot, monkey, red deer, fallow deer, mouflon, feed.

Vstupní předpoklady:
Materiál předpokládá znalost cizího jazyka minimálně na úrovni A2 podle společného Evropského referenčního rámce.

Obsah tematického celku:
1) Výchozí text o zoologických zahradách.
2) Odborná slovní zásoba k tématu.
3) Cvičení k osvojení slovní zásoby.
4) Otázky k tématu.
5) Shrnutí tématu s použitím probrané slovní zásoby.

Metodické postupy a organizace výuky:
Pro osvojení tématu je použito hlasité čtení, procvičování, čtení s porozuměním, práce s různými typy cvičení, práce ve dvojicích, dialog a frontální procvičování.

Předpokládané výsledky výuky:
Žák:
1) dokáže přečíst výchozí text se správnou výslovností a intonací,
2) zvládne pojmenovat exotická zvířata a použít výrazy spojené s jejich chovem,
3) dokáže aktivně použít odborné výrazy v následných cvičeních,
4) aktivně tvoří otázky k tématu a dokáže je zodpovědět, vede dialog na téma významu a užitečnosti zoologických zahrad,
5) dokáže informovat o regionální zoologické zahradě na Větrovech a o oborách v okolí Tábora.

Literární zdroje a jiné prameny:
Hornby, A.S. *Oxford Advanced Learner's Dictionary of Current English.* 8. vydání. Oxford: OUP, 2010. ISBN 978-0-19-4799027.
Voráček, Jaroslav. *Zemědělská angličtina.* 1. vydání Praha: Profi Press, 2004. ISBN 80-86726-08-8.

Zoological gardens and their current function

Zoological garden

It is a large park, where a lot of exotic and native animals are bred. Also endangered animals which are nearly extinct in free nature are bred there.

Animals live in enclosures that often attempt to replicate their natural habitats or behavioral patterns, for the benefit of both - the animals and visitors. Nocturnal animals are often housed in buildings with a reversed light-dark cycle, that means only dim white or red lights are on during the day so the animals are active during visitor hours, and brighter lights on at night when the animals sleep. Special climate conditions may be created for animals living in extreme environments, such as penguins. Special enclosures for birds, mammals, insects, reptiles, fish, and other aquatic life forms have also been developed. Some zoos have walk-through exhibits where visitors enter enclosures of non-aggressive species, such as lemurs, marmosets, birds, lizards, and turtles.

The aim of the zoological gardens is not only protection and reproduction of animals, they should also educate, research and be a place for relaxation of the visitors.

The oldest zoological gardens were founded in China around 2000 B.C. at the court of the Emperor. The oldest zoological garden which exists till today is the zoological garden in Vienna. This garden was founded in 1752.

Conservationists criticize and protest against the way of breeding animals in unnatural conditions and in cages. According to the researches animals can adapt the conditions they are living in and their life is longer.

The largest zoological gardens in the Czech Republic are in Prague, Liberec or in Dvůr Králové nad Labem. In South Bohemia there are two zoological gardens: in Hluboká nad Vltavou and in Větrovy near Tábor.

Větrovy is a small village not far away from Tábor. In the garden tourists can see a lot of exotic animals, they can relax and visit the restaurant or pension right in the area of the zoological garden. The garden stretches on a large area in the nature, in the garden there is a playground for children, visitors have also opportunity to have a ride in a coach.

In the garden, there work 31 permanent employees, at special occasions at weekends more people are employed as assistants. A zoologist and 4 animal keepers take care of the animals. A vet is available for all the time. In the garden bears, lions, monkeys, parrots, a bison, a fox or kangaroos are bred.

Gameparks

Another possibility, how to spend freetime, is to visit a gamepark. It is an area, where wild animals are bred. Visitors can admire red deers, mouflons, fallow deers or wild boars in their natural environment. In some gameparks, visitors can stay overnight or take part at a hunt.

One of the gameparks in the region of South Bohemia is near the village Brandlín. Brandlín lies about 15km away from Tábor. Tourist can walk through the gamepark and they can also rent one of the two log cabins.

In the park, there is also a bicycle trail, so many families cycle there and watch the animals. Also tours and lectures for public are organized. These are prepared mostly for schools and nursery schools to show the children nature and animals.

In the gamepark, there is one central crib and a lot of smaller cribs. The animals are fed with feed concentrate, hay, chesnuts, beech nuts, beet, potatoes, fruit and carrots.

fallow deer - daněk

mouflon - muflon

endangered - ohrožený

extinct - vyhynulý

enclosure - výběh, ohrada

natural habitat - naleziště

nocturnal - noční

dim - tlumený

mammals - savci

reptiles - plazi

log cabin - srub

hunt - hon

marmoset - kočkodan

lizard - ještěrka

coach - kočár

bison - zubr

fox - liška

kangoroo - klokan

research - zkoumat, výzkum

conservate - chránit

Suggestions how to practice the topic

Read the text about the landscape and translate it.

In pairs make questions according to the text and answer them in a dialogue! For example:

1. Where is the oldest zoological garden in the world?
2. What is the aim of zoological gardens?

Translate the expressions and give an example for each of the animal group!

savci - _____ :

ptáci - _____:

obojživelníci - _____:

plazi - _____:

ryby - _____:

bezobratlí - _____:

Make two groups. One group collects advatages of zoological gardens, the second group represents the conservationist, who are against the zoological gardens. Make a discussion!

Explain these expressions!

natural habitat, zoological garden, game park, nocturnal animals, enclosures, endangered animals

Answer the questions!

1. Can you give some examples of endangered animals?
2. Why do animals in zoological gardens live longer than in the nature?
3. Why are zoological gardens founded?

For a group of students prepare a short speech about zoological gardens and game parks, summarize the most important information from the text!

Anglicko – český slovník odborných výrazů

A
acid rain – kyselý déšť
alder – olše
altitude – nadmořská výška
amphibian – obojživelník
annual – jednoletý
annual milk yield – roční dojivost
arable land – orná půda
ash – jasan

B
badger – jezevec
baler binder – balíkovací lis
barley – ječmen
barn – stodola
beaver – bobr
bee hive – včelí úl
beech – buk
bone meal – kostní moučka
breed – chovat, plemeno
bridle – uzda
bristles – štětiny
buckwheat – pohanka
bush – keř

C
calf nursery – kotec pro telata
captured – v zajetí
car exhausts – výfukové plyny
carbohydrates – sacharidy
carbon dioxide – oxid ukličitý
carnivorous plants – masožravé rostliny
cartilage – chrupavka
catfish – sumec
cattle – dobytek
cave – jeskyně
cereals – obiloviny
clover – jetel
combine harvester – kombajn
coniferous – jehličnatý
conservation – ochrana
conversion – přeměna
crop rotation – osevní postup
cultivation device – kultivační zařízení

D
dairy cow – dojnice
dam – přehrada
damage – poškodit
deciduous – opadavý, listnatý
deforestation – odlesňování
draught horse – tažný kůň
drill seeder – secí stroj
drilling – drezúra
dung – hnůj, chlévská mrva

E
efficient – výkonný, účinný
elk – los
elmtree – jilm
enclosure – výběh, ohrada
endangered – ohrožený
environment – životní prostředí
essences – silice
evaporation – vypařování
exploit – těžit, využívat
extinct – vyhynulý

F
facility – vybavení
fatty acid – mastná kyselina
feather – peří
feed – krmit
feed concentrate – jadrné krmivo
fern – kapradina
fertilize – hnojit
fertilizer – hnojivo
fibre – vlákno, vláknina
fibre plants – přadné rostliny
field – pole
fir – jedle
floods – záplavy
flower bed – květinový záhon
fodder crops – pícniny
folic acid – kyselina listová
food trolley – krmný vůz
fork – vidle
forklift – vysokozdvižný vozík
fox – liška
fuel – palivo

G
gallop – cval
garbage – odpadky
generation – výroba
gills – žábry
grain – obilí, zrno
grain tank – zásobník na zrno
grass carp – amur
grasses – traviny
graze – past
green manure – zelené hnojení
greenhouse – skleník
greenhouse effect – skleníkový efekt

H
hare – zajíc
harrows – brány
harvest – sklizeň, sklízet
hatchery – líheň
hay – seno
hay rake and turner – shrnovačka, obracečka
haylage – senáž
heather – vřes
holding pond – sádka
hoof – kopyto
hops – chmel
hornbeam – habr
horse pen – ohrada
housing, stabling – ustájení
humidity – vlhkost

I
insect – hmyz
insect larvae – larvy hmyzu
ivory – slonovina

K
kangaroo – klokan

L
landscape treatment – péče o krajinu
larch – modřín
legumes – luštěniny
lichen – lišejník
lime – lípa
limestone – vápenec
lizard – ještěrka
loose-housing – volné ustájení
lucerne – vojtěška
lynx – rys

M
maize – kukuřice
mammal – savec
maple – javor
marsh – mokřina
meadow – louka
medical herbs – léčivé rostliny
milking machine – dojící stroj, zařízení
milking parlour – dojírna
moose – los
moss – mech, lišejník
mow – sekat trávu
N
nest – hnízdo
nitrogen – dusík
nourishment – strava, výživa
nutrition value – výživná hodnota

O
oak – dub
oats – oves
oil plants – olejniny
orchard – sad
otter – vydra
output – výkon
ox – vůl
ozone layer – ozonová vrstva

P
peat – rašelina
peat bog – rašeliniště
perennial – dvouletý
pest control – ničení škůdců
pike – štika
pikeperch – candát
pine – borovice
planting machine – sázecí stroj
plough – orat, pluh
poisonous plants – jedovaté rostliny
pollute – znečišťovat
poplar – topol
potash fertilizer – draselná hnojiva
potassium – draslík
potato seedling – sazečka
pregnancy – březost
process – zpracovat

protect – chránit

R
rainforest – deštný prales
rape – řepka
recoverability – návratnost
red deer – jelen
reed – rákos
reins – otěže
release – uvolnit, uvolňovat
reptile – plaz
retention of water – zadržování vody
roedeer – srnec
root crops – okopaniny
rotational reaper – rotační žací stroj
rowan – jeřáb
rubber plants – pryžovité rostliny
rural area – venkovská oblast
rural tourism – agroturistika
rye – žito

S
sack fry – plůdek
saddle – sedlo
saw dust – piliny
scales – šupiny
scythe – kosa
seed – sít
seeds – semena
sewing machine – secí stroj
sheaf – snop
shed – kůlna, hospodářské stavení
show jumping – parkúr
sickle – srp
silver carp – tolstolobik
slaughter – porážka(dobytka)
slaughter weight – jateční váha
slaughterhouse – jatka
slivers – štěpky
slurry – kejda, splašky
soil – půda
soil exploitation – využití půdy
soil fertility – úrodnost půdy
species – druhy
spelt – pšenice špalda
spike – klas
spraying machine – postřikovač
spreader – rozmetadlo
spring crop – jařina
spruce – smrk
stable – stáj
starch plants – škrobnaté rostliny
stirrup – třmen
stork – čáp
straw – sláma
stripping – umělý výtěr (ryb)
sugar beet – cukrová řepa
sulphur dioxide – oxid siřičitý
supplemental – doplňkový
swamp – bažina

T
team of horses – spřežení
teat – struk
tench – lín
tidal – přílivový
tie-up housing – vazné ustájení
toad – ropucha
tractor – traktor
trailer – přívěsný vůz
trap – past
tree frog – rosnička
trot – klus

U
unsaturated – nenasycený
urban area – městská oblast

V
vegetable patch – zeleninový záhon
viper – zmije
virgin forest – prales

W
waste – plýtvat
water frog – skokan
water vapour – vodní pára
weeds – plevele
weight carrying – nošení břemen
well – studna, vrt
wheat – pšenice
whip – bič
willow– vrba
winter crops – ozimy
winter habitat – zimoviště

Y
yield – výnos

Česko – anglický slovník odborných výrazů

A

agroturistika – rural tourism
amur – grass carp

B
balíkovací lis – baler binder
bažina – swamp
bič – whip
bobr – beaver
borovice – pine
brány – harrows
březost – pregnancy
buk – beech

C
candát – pikeperch
cukrová řepa – sugar beet
cval – gallop

Č
čáp – stork

D
deštný prales – rainforest
dobytek – cattle
dojící stroj, zařízení – milking machine
dojírna – milking parlour
dojnice – dairy cow
doplňkový – supplemental
draselná hnojiva – potash fertilizers
draslík – potassium
drezúra – drilling
druhy – species
dub – oak
dusík – nitrogen
dvouletý – perennial

H
habr – hornbeam
hmyz – insect
hnízdo – nest
hnojit – fertilize
hnojivo – fertilizer
hnůj, chlévská mrva – dung

CH
chmel – hops
chovat, plemeno – breed
chránit – protect
chrupavka – cartilage

J
jadrné krmivo – feed concentrate
jařina – spring crop
jasan – ash
jateční váha – slaughter weight
jatka – slaughterhouse
javor – maple
ječmen – barley
jedle – fir
jednoletý – annual
jedovaté rostliny – poisonous plants
jehličnatý – coniferous
jelen – red deer
jeřáb – rowan
jeskyně – cave
ještěrka – lizard
jetel – clover
jezevec – badger
jilm – elmtree

K
kapradina – fern
kejda, splašky – slurry
keř – bush
klas – spike
klokan – kangaroo
klus – trot
kombajn – combine harvester
kopyto – hoof
kosa – scythe
kostní moučka – bone meal
kotec pro telata – calf nursery
krmit – feed
krmný vůz – food trolley
kukuřice – maize
kůlna, hospodářské stavení – shed
kultivační zařízení – cultivation device
květinový záhon – flower bed
kyselina listová – folic acid

kyselý déšť – acid rain

L
larvy hmyzu – insect larvae
léčivé rostliny – medical herbs
líheň – hatchery
lín – tench
lípa – lime
listnatý – deciduous
lišejník – lichen
liška – fox
los – elk
los – moose
louka – meadow
luštěniny – legumes

M
masožravé rostliny – carnivorous plants
mastná kyselina – fatty acid
mech, lišejník – moss
městská oblast – urban area
močál – slough
modřín – larch
mokřina – marsh

N
nadmořská výška – altitude
návratnost – recoverability
nenasycený – unsaturated
ničení škůdců – pest control
nošení břemen – weight carrying

O
obilí, zrno – grain
obiloviny – cereals
obojživelník – amphibian
odlesňování – deforestation
odpadky – garbage
ohrada – horse pen
ohrožený – endangered
ochrana – conservation
okopaniny – root crops
olejniny – oil plants
olše – alder
orat, pluh – plough
orná půda – arable land
osevní postup – crop rotation
otěže – reins
oves – oats
oxid siřičitý – sulphur dioxide
oxid uhličitý – carbon dioxide
ozimy – winter crops
ozonová vrstva – ozone layer

P
palivo – fuel
parkúr – show jumping
past – graze
past – trap
pašování – smuggling
péče o krajinu – landscape treatment
peří – feather
pícniny – fodder crops
piliny – saw dust
plaz – reptile
plevele – weeds
ploutev – fin
plůdek – sack fry
plýtvat – waste
pohanka – buckwheat
pole – field
porážka (dobytka) – slaughter
postřikovač – spraying machine
poškodit – damage
prales – virgin forest
pryžovité rostliny – rubber plants
přadné rostliny – fibre plants
přehrada – dam
přeměna – conversion
přílivový – tidal
přívěsný vůz – trailer
pšenice – wheat
pšenice špalda – spelt
půda – soil
pytlák – poacher

R
rákos – reed
rašelina – peat
rašeliniště – peat bog
roční dojivost – annual milk yield
ropucha – toad
rosnička – tree frog
rotační žací stroj – rotational reaper
rozmetadlo – spreader
rys – lynx

Ř
řepka – rape

S
sad – orchard
sádka – holding pond
sacharidy – carbohydrates
savec – mammal
sázecí stroj – planting machine
sazečka – potato seedling
secí stroj – drill seeder
secí stroj – sewing machine
sedlo – saddle
sekat trávu – mow
semena – seeds
senáž – haylage
seno – hay
shrnovačka, obracečka – hay rake and turner
silice – essences
sít – seed
skleník – greenhouse
skleníkový efekt – greenhouse effect
sklizeň, sklízet – harvest
skokan – water frog
sláma – straw
slonovina – ivory
smrk – spruce
snop – sheaf
spodní voda – ground water
spřežení – team of horses
srnec – roedeer
srp – sickle
stáj – stable
stodola – barn
strava, výživa – nourishment
struk – teat
studna, vrt – well
sukulenty – succulent plants
sumec – catfish

Š
škrobnaté rostliny – starch plants
štěpky – slivers
štětiny – bristles
štika – pike
šupiny – scales

T
tažný kůň – draught horse
těžit, využívat – exploit
tolstolobik – silver carp
topol – poplar
traktor – tractor
traviny – grasses
třmen – stirrup

U
umělý výtěr (ryb) – stripping
úrodnost půdy – soil fertility
ustájení – housing, stabling
uvolnit, uvolňovat – release
uzda – bridle

V
v zajetí – captured
vápenec – limestone
vazné ustájení – tie-up housing
včelí úl – bee hive
venkovská oblast – rural area
vidle – fork
vlákno, vláknina – fibre
vlhkost – humidity
vodní pára – water vapour
vojtěška – lucerne
volné ustájení – loose-housing
vrba – willow
vřes – heather
vůl – ox
vybavení – facility
výběh, ohrada – enclosure
vydra – otter
výfukové plyny – car exhausts
vyhynulý – extinct
výkon – output
výkonný, účinný – efficient
výnos – yield
vypařování – evaporation
výroba – generation
vysokozdvižný vozík – forklift
využití půdy – soil exploitation
výživná hodnota – nutrition value

Z
zadržování vody – retention of water
zajíc – hare
záplavy – floods