

Enjoy the Countryside SAFELY

Poisonous Plants worksheet 3

LESSON PLAN / TEACHERS' NOTES

TOPIC: this lesson introduces the idea of plant defences and warns children of some of Britain's most dangerous plants.

1. Can you imagine the countryside if there were no plants? What would you miss most?

AIM: To introduce the topic by leading children to consider how important plants are.

Give the children a minute to imagine an earth without plants. What else would disappear if the plants went?

- Prompt children to think about plants we EAT, and things we MAKE from plants.
- Prompt them to think of as many uses of trees as they can.
- Make sure pupils understand that plants produce oxygen which we need to breathe.

Elicit individual responses from class members before asking children to write their three favourite uses/types of plants.

Three things I would miss if there were no plants:

- a) _____
- b) _____
- c) _____

Discussion.

AIM: To teach children that some plants are dangerous, because they have defence mechanisms.

Ask children if they think plants want to be eaten. Why, or why not?

- Most plants do NOT want to be eaten because it harms them.
- Some plants rely on animals eating their fruit to spread their seeds across large areas.

Ask children if they can think of ways plants stop animals from eating them.

- Some plants have poisonous parts.
- Some plants can hurt if we touch them.
- Some plants are very difficult to chew!

2. Work with your classmates to label as many of these pictures as you can.

AIM: To teach children to recognise the names of common toxic British plants, some of Britain's most dangerous plants, and examples of plants with different types of defence mechanism.

- Take samples or good photographs of some of these plants into the classroom if possible.
- Print clear photographs of Giant Hogweed and Parsnip Plants to ensure children recognise them.

Elicit plant names orally from the children before setting the gap-filling exercise in groups.

Explain the notes (below) to teach the children about each plant. Elicit knowledge from the children whenever possible.

A



__tree__

B



__rose__

C



__blackberry__

D



__holly__

E



__yew__

F



daffodil__

G



__giant
hogweed__

H



__coconut__

I



__stinging
nettles__

J



__parsnip
plant__

Notes:

D. Holly berries are poisonous to humans if eaten, but food for birds.

E. Yew tree berries are extremely poisonous to humans if eaten.

F. Daffodil bulbs look like onions. They are poisonous to humans but a source of food to small animals like squirrels and mice.

I. Stinging nettles cause pain but are not dangerous.

G. Giant Hogweed is taller than an adult and it mainly grows along rivers. It is an invasive foreign species that is taking over some areas - try to find out if there is Giant Hogweed in your area. The sap causes burns, severe blistering and can result in lifelong damage to the skin, making sunburn rashes appear any time the skin is exposed to daylight. It can cause blindness if sap gets in the eyes.

GIANT HOGWEED



J. The parsnip plant is a native species that grows to about knee-height and its sap has a similar effect to giant Hogweed.

If you touch either plant:

- Wash your hands with soap and water.
- DO NOT TOUCH YOUR EYES!
- Cover your skin so it is hidden from daylight.
- If you feel ill, or if you get big blisters, go to the doctor or the nearest hospital.

3. One of these plants doesn't grow in Britain. Which one? _coconut_____

4. True or false, what do you think?

Allow children to attempt this question as a guessing game, and then work through the answers with the class.

a) It is against the law to pick wild flowers in Britain TRUE / FALSE

The law on wild plants in the UK varies, but all British councils and regions have at least some species that are legally protected. It is sensible to assume picking any wild flower is illegal.

b) People used to think tomatoes were deadly poison TRUE / FALSE

Tomatoes and potatoes are from a family of very poisonous plants called nightshade, so when Europeans first saw them in the Americas they assumed they were also toxic. The fruit of tomato plants and the roots of potatoes are the only edible parts - the leaves and other parts are indeed poisonous.

c) Red and orange autumn leaves have extra poison TRUE / FALSE

Autumn leaves turn red and orange because they are losing their green chlorophyll, which they use to make sugar.

d) All medicines from the doctor are made of plants TRUE / FALSE

About half of all prescription medicines are derived from plants.

e) The earth has more than 3000 types of edible plant TRUE / FALSE

The real number is about 20,000 types.

f) Some plants can eat animals TRUE / FALSE

They include Venus Fly Traps and Pitcher plants, which eat insects.

5. Plants have different ways to stop animals eating them. Copy each plant name from question 3 into the correct box. Can you add any more examples?

AIM: To reinforce safety lessons and plant recognition taught in question 2.

Discuss the plants in question 2. Ask children to think about how each plant stops animals eating it.

Notes:

- Trees and coconuts are tough and woody which makes them very difficult to chew.
- Roses and blackberries have thorns which make it difficult to pick their fruits and very painful for large animals to eat their stems.
- Holly and Yew trees have poisonous berries (although they are not poisonous to some animals).
- Daffodils have poisonous bulbs.
- Stinging nettles have poison in their leaves, and tiny spikes like hairs to inject it into us if we touch them. Their sting can be soothed with antihistamine cream.
- Giant hogweed and Parsnip plants have poison in their stalks. If we pick them, it burns our skin and makes terrible blisters.

Ask children to copy the name of each plant from question 2 in the correct flower below.
Ask the children who finish first to think of additional examples.

ANSWERS:

Thorns that hurt if you touch them

1. rose
2. blackberry

Being very hard & difficult to chew

1. trees
2. coconut

Poison that makes you sick or die if you eat them

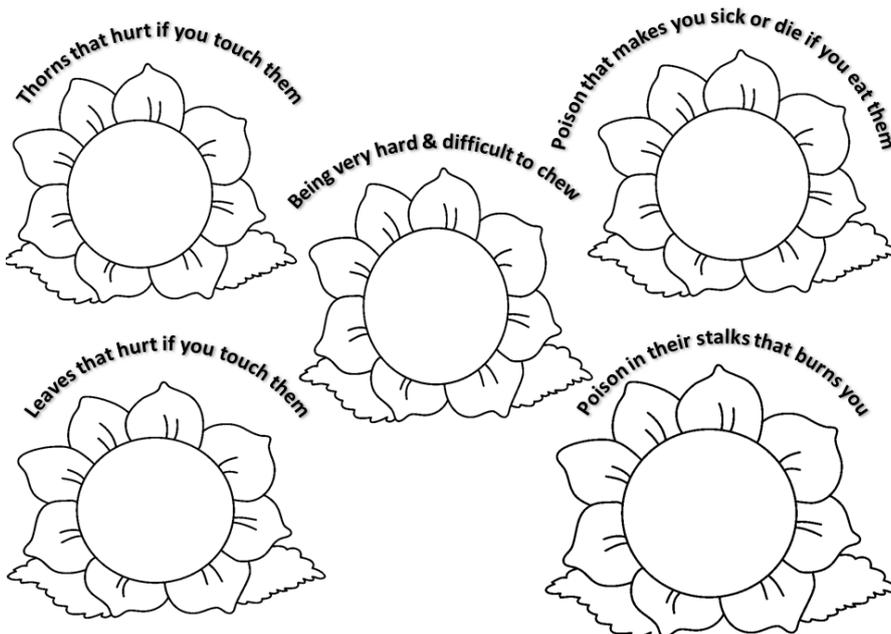
1. holly
2. daffodils
3. yew berries

Leaves that hurt if you touch them

1. Stinging nettles

Poison in their stalks that burns you

1. Giant hogweed
2. Parsnip plant



5. Plant safety rules! Fill in the gaps.

I must never pick wild plants because it is against the law, and they could be dangerous. If I accidentally pick Giant Hogweed or Parsnip Plants I must wash my hands with soap and water, and I must not touch my eyes. I must never eat berries that I find growing in the countryside, even if I see birds or other animals eating them. I should look out for stinging nettles whenever I go for a walk, and make sure I don't touch them. If I accidentally touch them, I can ask for antihistamine cream.

Follow-on activities/challenges

- ART: Ask the children to design a garden and draw it. Will it be a poison garden with dangerous plants? Will it be an edible garden with plants to eat? Will it be a nature garden to encourage wildlife, or a pretty garden planned just for beauty?
- ICT: The children design a warning sign about a dangerous plant. Encourage them to download an image of the plant, and plan the wording and layout to warn people of the danger. **BE AWARE THAT SOME ONLINE IMAGES OF CHILDREN WITH INJURIES CAUSED BY GIANT HOGWEED MAY BE DISTRESSING.**
- SPRINGTIME ACTIVITY: Ask children to bring pips or seeds from fruit and vegetables that they have eaten to school, and yoghurt pots or other plastic containers to turn into plant pots. Show the children how to plant the seeds and see how many germinate. Ask them to think about why some will germinate and others will not.

Remember to teach your family what you have learned today. Find out more at www.EnjoyTheCountryside.com

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