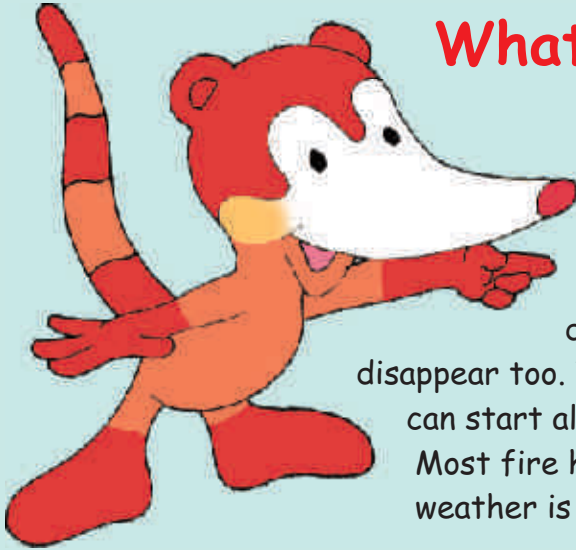




**What do you know
about fire hazards?**



What is fire?

Fire is a chemical reaction between three elements: oxygen, heat and fuel. If any of the three elements disappear, the fire will disappear too. If conditions are right, a fire can start almost anywhere at any time. Most fire hazards occur when the weather is dry and hot.

The heat source for starting a fire in nature can be natural, for example a lightning strike, or human-made, like careless use of fire or even cigarettes. Fuels include anything from dry grass and leaves to branches, wood or - houses!



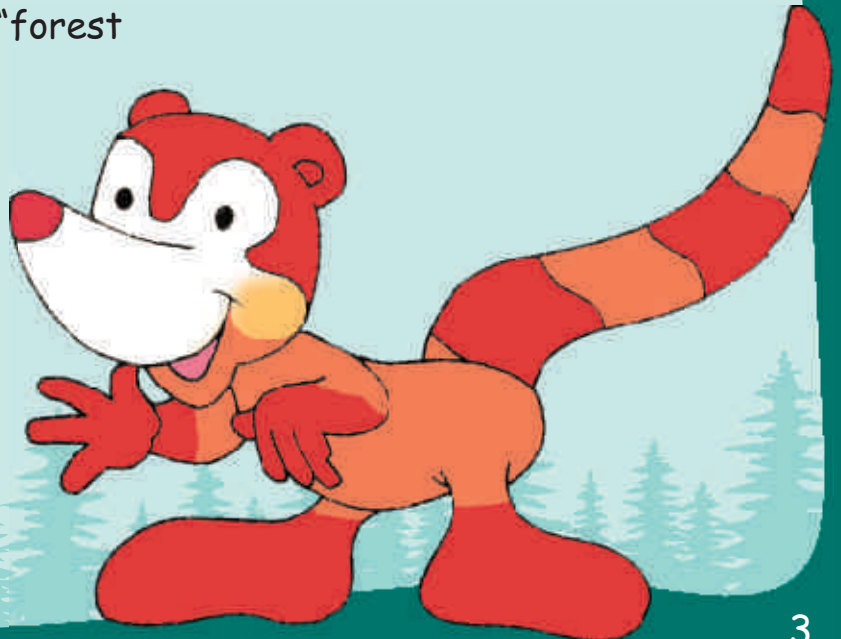
Different types of fuel burn at different temperatures, because each substance has a so-called "ignition temperature". This is when the substance becomes hot enough to burst into flames. For example, because of its low ignition temperature, the oil in the leaves of eucalyptus trees is one of the most explosive fuels that

What are wildfires?



Fires can get out of control and spread over large areas very easily. For instance, an unattended small campfire may easily get out of control and cause a very

large, uncontrolled fire. These escaped fires are often referred to as "wildfires". Depending on what type of vegetation or material is burning they can be referred to as "forest fires", "bush fires", "grass fires" or "peat fires".



What causes wildfires?



The most common natural cause of wildfires is lightning.

However, most wildfires are caused directly or indirectly by people, for example fires can escape when farmers burn the land to make it more fertile

(these are referred to as uncontrolled or escaped land-use fires) or by children playing with matches. Fires can also start when people are



careless in using cigarettes, when cooking in the woods or in using campfires. Sometimes, people even start fires intentionally



Are wildfires good or bad?

Fire can be a useful tool for human beings as long as it is under control, but if it gets out of control it can become dangerous both for people and nature. Here are some examples of both positive and negative effects of fire for people and in nature.

People:

- 🍃 Positive effects: useful tool in agriculture, pastoralism and forestry
- 🍃 Negative effects: harmful for human health and safety, destroys property (houses, stores, public buildings, schools, important equipment, etc.)

Nature:

- 🍃 Positive effects: Fire can be useful in maintaining the ecosystems, it can stimulate the growth of grass, help some plants to reproduce as some seeds can germinate only after a fire.
- 🍃 Negative effects: large and destructive fires can destroy and reduce the number of different types of plants and animals in an area, and can thereby permanently spoil the richness of the landscape



What can be done to prevent wildfires from happening?

As most wildfires are caused by people, many of them can also be prevented. Here are some ideas on how you can prevent fires in your own neighbourhood:

- ❖ Never play with matches. One stick can burn the whole forest!
- ❖ If you see someone playing with fire or throwing a cigarette butt in the woods, tell an adult about it immediately.
- ❖ Never make a campfire without the help of your parents or other adults.



- ❖ If the weather is windy and dry, do not make a campfire.
- ❖ If the conditions are good and you decide to make a campfire, select an open place, far from trees, dry leaves and branches. Clean the earth of rubbish for 3 metres around the place where you plan to build a campfire.
 - ❖ Never leave a fire alone!
 - ❖ Before leaving the area, put out the fire carefully with water and earth.
 - ❖ Keep the forest environment clean. Do not leave bottles or glass litter in the forest. They might act as a magnifying glass and start a fire.



What can you do to protect yourself and your friends from fires?

If a dangerous fire comes close to you:

- 🍃 Don't panic
- 🍃 Move away from the fire
- 🍃 Ask adults for a safe house to protect you from the flames

If thick smoke makes breathing difficult

- 🍃 Cover your mouth with a dry handkerchief
- 🍃 Ask adults for a safe house to protect you from the smoke

If your clothes catch on fire:

- 🍃 Don't panic
- 🍃 Move away from the fire
- 🍃 Drop to the ground and cover your face
- 🍃 Roll over and over until the fire is out

If a friend of yours or one of your family members is on fire:

- 🍃 Wrap them in a blanket
- 🍃 Roll them over on the ground until the fire is out



What can be done to protect Your house from wildfires:

- Make a firebreak around your house. A firebreak is a barrier of cleared or ploughed land intended to stop and control the spread of forest, grass or bush fire. A river or a road can also act as a firebreak.
- Remove all rubbish and flammable material around your house, such as dry grass, leaves and branches.
- Store flammable substances far away from your house.
- In case of an approaching fire, use sprinklers to keep the ground, the vegetation around the house and the roof of the house damp.
- Keep fire-fighting equipment such as water hose and fire extinguisher, easily accessible.



Test your knowledge on fires!



Questions:

1. What are the three elements needed for a fire?
2. What does "ignition temperature" mean?
3. What are the main causes of forest fires?
4. What is a firebreak?
5. List five important fire prevention measures you and your parents can do to make your house safer from forest fires or other wildfires?
6. If your clothes catch on fire, what should you do?



Answers:

1. Oxygen, fuel and heat.
2. "Ignition temperature" is the temperature at which the preheated substance will burst into flames.
3. Most fires are caused directly or indirectly by people's carelessness for example, unattended campfire, cigarettes or children playing with matches. Some fires are caused by lightning strikes.
4. A firebreak is a barrier of cleared or ploughed land intended to stop and control the spread of forest or grass fire. A river or a road can also act as a firebreak.
5. (a) Make a firebreak around your house (b) Remove all the rubbish around your house (c) Store flammable substances far away from your house (d) Keep fire-fighting equipment easily accessible (e) In case of an approaching fire, use sprinklers to keep the ground, the vegetation around the house and the roof of the house damp.
6. Do not panic. Move away from the fire. Drop to the ground and cover your face. Roll over and over until the fire is out.



Glossary:

- Ecosystem:** plants, animals and natural conditions, and the relationships between them in a specific area
- Firebreak:** a barrier of cleared or ploughed land intended to check a forest or grass fire. A river or a road can also act as a firebreak.
- Forestry:** the science of growing and caring for forests
- Germinate:** to begin to develop (seeds)
- Pastoral:** work dealing with people who keep herd animals or Rural life
- Prevent:** to keep from happening or existing

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Avoid wildfires!



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