



LESSON PLAN 1

LEARNING OBJECTIVE

- To understand the importance of appropriate clothing for summer months and how they protect you.
- To remember our solar steps and how to put them to practice when needed.

MATERIALS NEEDED

- pictures of types of weather
- wellies
- umbrella
- sunglasses
- hat (summer & winter type)
- types of summer clothing*
- types of winter clothing
- sunscreen
- water
- torch

TASK

- Put the correct sun safe items in the correct category (summer or winter)
- Look at the types of clothing that are placed in the categories and discuss why they are suitable for them categories
- Discuss how you to be sun safe and how you need to be sun safe in summer and winter (look at types of holidays e.g skiing)

EXPERIMENT

- Shine a torch through types of light, dark and uv protected clothing to see what light can get through. explain how this is showing the sun can penetrate the skin even though fully clothed.

UNDERSTANDING OUR SOLAR STEPS

- S shade (discuss types of shading)
- O ozone (explain the ozone layer and its purpose/function)
- L lotion (types of sunscreen, factors and protection)
- A aqua (why you need to stay hydrated and effects on body)
- R remember (why you need a hat and to keep shoulder covered up)

RECAP

Discuss points covered in todays lesson and how much can be remembered. let children know recap on lesson will be in a week to see if they still remember points made.



LESSON PLAN 2

LEARNING OBJECTIVE

- To learn how different animals can use different methods to protect themselves.
- Compare the differences between the animals and how they protect themselves.

MATERIALS NEEDED

- Pictures of different animals
- A globe/map of the world.

TASK

Ask the children to describe the animals talk about their skin types e.g. fur, scales, feathers etc. look at the globe/map of the world and discuss where the different animals are from and what the weather is like in the country they are native to. discuss how animals protect themselves from the weather. how do they keep cool etc? use worksheet 2 as classroom activity.

EXPERIMENT/CLASSROOM ACTIVITY

Separate the children into groups and ask each group to pick an animal. get them to explain to the children how that animal protects themselves and allow the other groups to guess what animal they are talking about.

RECAP

Discuss points covered in todays lesson and how much can be remembered. let children know recap on lesson will be in a week to see if they still remember points made.



LESSON PLAN 3

LEARNING OBJECTIVE

- How the sun can cause irreversible damage to the skin
- How UV radiation can penetrate the skin changing its colour and how to protect it

MATERIALS NEEDED

- X2 bananas
- Magnifying glass

TASK

Discussing which parts of our bodies are most vulnerable to the sun and what can be done to make sure that it's protected in the best way (see worksheet 3.5). Ask them what items they can use to protect each part of their body. Explain why the use of sunscreen/sunblock is so important and how it protects the most vulnerable parts of the body. Talk about the skin and how it's the largest organ of the body, discuss its function e.g. how it protects our other organs, how when we sweat in the sun, the body becomes dehydrated and why it's so important to drink plenty of fluids. Explain how our skin maintains our body temperature.

EXPERIMENT 1

Using two bananas explain to the children that the skin of a banana imitates the human skin whilst in the sun and reacting to the heat. Placing one banana outside or in the window in direct sun light and placing the other in a cool shaded area inside the classroom. Ask the children to document the changes to the banana outside compared to the banana inside.

EXPERIMENT 2

Using a magnifying glass, children can compare skin types and different areas of the skin i.e. hands, feet, face (rough/soft) Looking at moles and freckles, colour and texture of each other's skin. Document their differences and how this can be affected by the sun.

RECAP

Discuss points covered in today's lesson and how much can be remembered. Let children know recap on lesson will be in a week to see if they still remember points made.



LESSON PLAN 4

LEARNING OBJECTIVE

- To show the children the sun has good and bad effects on all things living.
- Too much sun exposure can cause sunburn, skin damage and in extreme cases skin cancer.
- To teach the children that shade can help stop damage to the skin.
- To be aware of the different times of the day the sun is at it's strongest.

TASK

Discuss what the purpose of our sun is and what it does for us. Talk about the good and bad points it has. Discuss how these things impact on our day to day life.

GOOD POINTS

- The sun gives energy to earth to make things grow
- The sun gives us light and warmth
- Discuss how it's responsible for the earths weather and climate. It makes plants grow which gives food to animals that then gives food for us to survive.
- Brush on the water cycle process.
- Gives us vitamin d
- Uv light can help with certain skin conditions and also help kill bacteria. They also help certain birds and insects find food.

BAD POINTS

- The sun can cause sunburn discuss with the children how over exposure to the sun can cause sunburn and continuous expsure to the sun can potentially lead to skin cancer in later life.
- Tell the children the differnt types of uv rays the sun can produce:
- Uva rays ageings rays
- Uvb rays burning rays
- Uvc rays these rays are very powerful but our ozone layer acts as a natural protection and does not let them through.
- Explain how the suns damaging uv rays can cause wrinkles and premature ageing of the skin.

OUTSIDE ACTIVITY

- Whist outside walk around the school grounds with the children and ask them to record where the shaded areas are and where there is potential for shaded areas to be.
- Discuss whether the shaded areas are in the correct places, eg. Are they where most of the children congregate?
- Ask the children to make a note of all the different things that can be used as shade and where they think the shaded areas should be.

RECAP

Discuss points covered in todays lesson and how much can be remembered. Let children know recap on lesson will be in a week to see if they still remember points made.



LESSON PLAN 5

LEARNING OBJECTIVE

- To understand how the sun produces uv radiation.
- To understand how uv radiation cannot be seen but is what alters changes to our skin
- To understand how this occurs and what long term damage can take place

TASK

Explore what the students may already know about uv radiation. Talk about the three types of uv ray; uva, uvb & uvc

Uva are called the aging rays, talk about what uva rays can do to the skin e.g cause wrinkles, can penetrate through glass, alters our dna and thought to cause skin cancer

Uvb are called the burning rays, talk about what uvb rays can do to the skin e.g cause sunburn, alter dna and is thought to be the cause of most skin cancers

Uvc do not get through our atmosphere and does not come through sunlight, they are not associated with skin cancer but has more energy than other types of uv rays.

Talk about the how the levels of uv change due to time of year, time of day, location and weather. Look at these different scenarios and use this information to collate within a report

EXPERIMENT

Create a uv index chart for the class. This can be used and plotted everyday to monitor the ultra violet radiation levels strength

RECAP

Discuss all points covered and ask students if they have any questions and if they can remember all points covered.



LESSON PLAN 6

LEARNING OBJECTIVE

- To understand the peak time of day that earth is exposed to uv radiation
- To understand why we need to be at our most protected during these times
- To understand and remember the key steps to being protected
- To understand how shadows are formed

TASK

Discuss how uv rays are the strongest between the hours of 11am and 3pm. Ask the students about ways to protect themselves during these peak times. Talk about the effects of sunburn. Discuss outdoor workers and how they are affected in different weather conditions. See worksheet 6

EXPERIMENT

Try the shadow test. Go outside during peak times of the day and record the length of your shadow. Your shadow will be larger at non peak times and smaller at peak times

RECAP

Discuss all points covered and ask students if they have any questions and if they can remember all points covered.