

Act on Climate Change
Worthington Lakes Education Centre
Key Stage 2 activity list (9.45am-2.30pm)

AM. Water Cycle

To include : Reading of water meter on arrival **(55 minutes)**
 Presentation
 Water Cycle test of knowledge
 How much water do you use? (Y4-Y6) or How do we use water? (Y2-Y6)
 Water in developing countries

Tread more lightly – Eco trail (use of compass Y5 & Y6 only) **(55 minutes)**
 Animal footprints (Y2-Y4 only)
 Minibeasts (March-September) Choice of 1 activity
 Pond dipping (March-September)

Pollution & waste activity **(30 minutes)**

LUNCH **(30 minutes)**

PM. The Energy game **(40 minutes)**
 Weather activity (Y5 & Y6 only) Choice of 1 activity
 Rainforest game
 Environmental art (palettes)

I Promise
 Weather (continued) (Y5 & Y6 only) **(40 minutes)**
 Invent & make a rainforest minibeast Choice of 1 activity
 Paint a butterfly
 Environmental art (continued)

Badge making **(20 minutes)**
 Keyring making

End of day presentation
 Follow up visit discussion **(15 minutes)**

All worksheets, palettes, rainforest minibeasts, badges/keyrings are for the children to either take home or back to school.

Description of Activities.

AM Activities

Water Cycle

Water monitoring :- On arrival one member of the group will be asked to take a reading from the water meter, this will be followed by a reading before lunch, after lunch and at the end of the day. This information will be used to calculate how much water the group have used whilst at the centre. Visual aids in the form of a cubic metre will be used to show the comparison between litres and cubic metres.

Presentation :- An interactive presentation based on where water comes from naturally, its journey to our taps, what it is used for, how much we use, the journey of our dirty water, and water safety.

(A pre-visit pack will be sent to the class teacher, and we ask that it be worked through with the class to enhance their enjoyment on the day).

Water cycle - test of knowledge :- A fun way for the children to demonstrate their understanding of the Water Cycle.

How much water do you use? :- (Y4 - Y6) The class can work out with the aid of 'water tokens' how much water they use in a day. This can be followed by thinking about ways in which they could save water at home and school and why they should.

Are you a water waster or a water saver???

How do we use water? :- (Y2 – Y6) The class using worksheets can draw and write ways in which they use water and with this they can think of ways in which they could save water at home and school.

Global dimension :- A short group discussion on water in developing countries looking at how they get water, how much they use, diseases and Wateraid.

Tread more lightly – Eco trail :- Pupils (led by member of staff) use their map reading and orienteering skills to find their way around the site. Along the trail they will hunt for pre-hidden clues that will help them assess their carbon footprint as a group, as well as looking at local wildlife. Alternatively for Y5 & Y6 a compass can be used to complete the trail.

Animal footprints :- (Y2-4 only) Pupils acting as detectives walk around the site looking for animals footprints. Whilst on the walk they will find animals homes, and look at some of the adaptations the different creatures have which enable them to feed, hunt and survive in their own habitats. Keeping nice and quiet on their trek the pupils may be able to see squirrels in their dreys or even grebes catching their food.

Minibeasts :- Pupils using bug boxes are given the opportunity to harmlessly catch and observe some of the many invertebrates at Worthington Lakes. Whilst doing this they will learn about the habitats and adaptations of the creatures they find. Pupils each have a worksheet to fill in that asks questions about their chosen creature, and a minibeast sheet for drawing their catch.

Pond dipping (March to September) :- A chance to study an aquatic environment, to look at adaptations for life in fresh water, and to think about food chains and webs. Pupils each have a worksheet to fill in that asks questions about their chosen creature, and a 'pond' sheet for drawing their catch.

Pollution & waste activity (Time permitting both parts of this activity will be included) :- A fun game with all the class. Each child is a different organism that lives in water. However problems happen and the food chain is affected when pollution gets into the pond! The game highlights the different types of pollution and how this can get into the food chain harming plants, animals and even humans. A link with the Water Cycle Presentation, the ways in which we use water, how we pollute it and the effects upon the environment.

Lunchboxes – A larger than life lunchbox is used to promote the 3 R's – reduce, reuse & recycle. As an Eco-Centre we promote waste free lunches and visitors can be entered into our competition. The class at the top of the Recycle League at the end of term will win a prize for the class. Please read the eco-friendly lunchbox information.

PM Activities

The Energy game: - An interactive and energetic game to highlight energy usage and conservation looking at our finite fossil fuel resources and how renewable energy resources are going to have to play a part in our lives. This activity is followed by: -

I Promise: - In this session the children get to think about the key messages from the day. They are each given a scroll on which they can write their message – I know.... I think.... I pledge.... I promise....

Weather activity: - (Y5 & 6 only) Pupils in small teams study the weather and recording their findings on the day of their visit and investigate how the weather may change in the future. When the investigation has taken place the children can then take on a role as either a weather presenter, cameraperson, director or clapper. The children have the opportunity to write a short script and then present their findings to the rest of the class with the aid of a 'TV' style weather chart. They can also use filming equipment to see themselves on screen! This activity covers the whole afternoon session.

Rainforest game: - A fun and energetic game where everyone takes on the role of either a rainforest tree, tribes person, creature, plant or the dreaded lumberjack. As the trees are lost the tribes people, creatures and plants, that need the trees for survival must find a new tree, but they are in competition with everything else...and each tree can only support so much!!!. This game aims to raise awareness of the destruction of these magnificent finite resources; the importance of rainforests on a local, regional, national and global scale, how they provide a habitat for thousands of plants and animals, that they produce much of the oxygen we breathe and how native tribes have lived non-destructively within them etc. This activity is followed by either:-

Invent & make a rainforest minibeast: - The pupils use their imagination to create a Rainforest minibeast and decide upon its key features, where does it live, what does it eat, how does it adapt to its environment etc. Then using scrap materials pupils can make their Rainforest minibeast in 3D.

Or: -

Butterfly casts: - Plaster casts in the shape of a butterfly, which the pupils paint as brightly and colourfully as possible. They can also think about symmetry and the special features that are often seen on butterfly wings used as warnings or for camouflage.

Artist palettes: - Pupils look for and stick onto their own palettes small items (i.e. leaves, petals) found on the site that represent the huge variety of colours created by nature. This activity can be continued into full environmental art or followed by painting a butterfly.

Environmental art & palettes: - Pupils wander through a designated area with an artists palette looking for a variety of colours created by nature. Using the palettes as an introduction to art and nature, pupils will create an art gallery, they will make their own picture frame from natural materials and then create a picture within it, which will remind them about their day. All the pupils can then walk through their own Environmental Art Gallery viewing each other's work.

Badge / keyring making: - A chance for the class to take home a last reminder of their day. Everyone is given a paper disc and a multicoloured rainbow pencil, which they use to draw something about their day. The disc is then made into a badge or a keyring.

End of day presentation: - A final round up of the day with a reminder about water safety and further discussion regarding the follow up visits to your school by United Utilities staff.

If you do have any specific requests please discuss them with us at the earliest opportunity because if they are feasible we may need some extra time to prepare materials.