

1/2/3. Finding out about the Water Cycle

Aims:

- To enable pupils to learn and understand what happens at each stage of the Water Cycle
- To introduce specific vocabulary related to the Water Cycle

Materials:

- Worksheet 1a/1b
- Worksheet 2 - printed on card
- Worksheet 3
- Scissors, glue sticks, paper fasteners, dictionary

Method:

- Ask pupils where they think fresh water comes from
- Explain that the Water Cycle is a natural system in our environment and it is called a cycle because it is continuous
- Hand out matching game and run as a class activity matching the words and pictures
- The next task is to put them in order
- Hand out Worksheet 1a and 1b. Ask pupils to cut out shapes and glue them into the correct place on the picture so that it will show the Water Cycle
- Pupils can then add words next to the pictures using the matching game to check their work
- Hand out Worksheet 3 at the appropriate level and ask pupils to complete
- Review their answers

4. What happens when the sun heats the water in the sea?

Aims:

- To enable pupils to understand the process of evaporation in the Water Cycle

Materials:

- A bucket and some chalk for each group
- Worksheet at appropriate level
- Timer
- Digital camera (optional)

Method:

- Hand out worksheet to each group and discuss the experiment. Walk around the playground or other areas of the school to look for a suitable sunny site
- Allow time for each group to create their puddle and take photographs
- Pupils visit their puddle after one hour and photograph or draw what they see
- Pupils return to class and write up their experiment
- Discuss the experiment and relate what has happened to the evaporation stage of the Water Cycle

5a/b. What happens to water when it is left in a container?

Aims:

- To provide experience of water evaporating
- To practice measuring skills

Materials:

- A measuring jug, 2 clear plastic beakers, cling film, a felt pen
- Worksheet at appropriate level and Water Level Record Sheet for each group

Method:

- Divide pupils into groups
- Hand out equipment and worksheet at appropriate level and the Water Record Sheet
- Discuss the task and check understanding
- Allocate safe space for each group to leave the beakers for the duration of the experiment and agree at what time over the next four days the levels will be measured
- Pupils write up their experiment and discuss their findings
- Key points for discussion - evaporation is part of the Water Cycle, water becomes vapour before it condenses and falls as rain
- Encourage pupils to look at their Water Cycle Wheel

6. How are clouds formed?

Aims:

- To enable pupils to understand condensation
- To enable pupils to see how clouds are formed

Materials:

- Some hot water in a jug, a clear glass bottle, an ice cube, a sheet of black paper for each group
- Worksheet 6 at appropriate level

Method:

- Divide pupils into groups.
- Hand out equipment and worksheet at appropriate level.
- Discuss the task and check understanding.
- Allow pupils to complete experiment and write up their findings.
- Discuss what they have seen and relate this to the Water Cycle.
- Key point for discussion - water vapour condenses making tiny drops of water in the vapour bigger - they are no longer invisible and form a cloud.

7. Making Rain

Aim:

- To provide experience of making rain

Materials:

- Plastic fish tank
- Cling film
- Ice cubes
- Worksheet 7 at appropriate level
- Video or digital camera if available

Method:

- This experiment may be carried out by small groups of pupils at different times during a day or a week - approximately 15 minutes will be needed to set up and carry out the experiment
- Divide pupils into small groups
- Hand out equipment and task card at appropriate level
- Discuss the task and check understanding
- Pupils carry out the experiment and if possible video/photograph what happens
- Pupils write up their experiment and discuss findings
- Pupils can do the potted plant experiment as an extension to this activity

8. Water droplets

Aims:

- To enable pupils to see condensation
- To enable pupils to discover that water vapour condenses from the air when cooled

Materials:

- Ice cubes, clear plastic beakers, a paper towel, cling film for each group
- Worksheet at appropriate level

Method:

- Divide pupils into small groups
- Hand out equipment and task card at appropriate level
- Discuss the task and check understanding
- Pupils carry out the experiment
- Pupils write up their experiment and discuss findings

9. True or False?

Aim:

- To check pupils knowledge and understanding of the Water Cycle

Materials:

- Worksheet 9a/b for each pupil

Method:

- Hand out quiz sheet
- Allow pupils time to complete and check answers
- This could be a homework activity