KS2 Rivers and Maps Day - Learning Opportunities

Water cycle and rivers:

- Using key words about the water cycle (e.g. condensation or clouds, precipitation or rain)
- Understanding the stages of the water cycle
- Using keywords about rivers (e.g. source, mouth, erosion, meander)
- Consider the impact of human activity on rivers and water (e.g. pollution)

Using a map and compass:

- Using a map to navigate (knowing 4 or 8 points of the compass)
  (Grid references, 4 or 6 figure, can also be used)

Working scientifically:

- Practise taking measurements in the field (e.g. water temperature, brook depth)
- Take data back to school to work on presenting data appropriately

Transferable skills:

- Developing awareness in an outdoor environment
- Developing self-confidence
- Co-operating (working with others)
- Being creative and solving problems
- Caring for the natural world

Day Plan

9.45 Arrival (Time to sort out visits to the toilet and changing into wellies)
Introductions:
- Getting to know the site
- Safety and conservation guidelines
- Key words and concepts about the water cycle and rivers
Optional snack break

First activity: Orienteering
- Navigating using a map and compass (inc. grid references if requested)
- Identifying trees on the orienteering course

Second activity: River Sketches (Orienteering course finishes at the riverbank.)
- Working in small groups to identify parts of the river and surrounding area, and to label a river sketch correctly, including the water cycle
- Working in small groups to take and record river water measurements, e.g. temperature, nitrates. (Clipboards and worksheets provided.)

Lunchtime: classroom and outdoor picnic area available. (Please take your rubbish back to school, to minimise the impact on the environment at the reserve.)

Afternoon activity: Lifecycles of freshwater invertebrates
- Using kick-sampling to survey the range of animal life in the brook
- Using identification keys and hand lenses to name freshwater invertebrates
- Questions and answers about the lifecycles of freshwater invertebrates
- Working in small groups to take and record brook water measurements, e.g. temperature, nitrates. (Clipboards and worksheets provided.)
- Compare data gathered in the river and in the brook, consider the differences and the impact of human activity and pollution.

2.45 Departure