

Chesworth farm



Horsham's Secret Paradise! This 36 hectare farm incorporates grassland, the River Arun, wildflower meadows, ancient hedgerows as well as a new wetland walk boardwalk. Outdoor education activities provided by experienced field teachers.

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Information for schools

Things to take on site visit

Clip board and pen/pencils

OS map

Site map if available

A4 paper and pencil for field sketch

Camera

Compass

Tape measure

Dog biscuits

Sweep net /sheet

Pond net (not one used at PB)

River survey recording chart

Plan of day

Suggested plan for fieldwork day for class of c30 children

10.00 School arrive

Introductions. Use of toilet. Brief snack stop if school requests.

Introduction

Welcome, Learning Outcomes, Plan of day/activities/organisation

10.30 Explore wetland

Introduction: Children describe this place and the features they can see (circle looking outwards, pairs take turns to speak)

Investigate river activity (30 mins) (River Look Out)

Observe and record river landscape features in pairs.

Investigate and record the direction of flow and speed of the river and

Evaluate method. In groups.

Field Sketch activity (30 mins) (Wetland Walkway)

Teacher led, each child makes sketch

12.00 Lunch

In picnic area by buildings. Use of toilets/wash hands

12.30 Explore Habitats (Back Field)

Flexibility for school to choose 2 options or spend longer on one activity.

Children describe this place and what habitats they can see (talk partners)

Pond dip activity (30 mins)

In pairs or groups

Minibeast hunt activity (30 mins)

Grass sweep, bush/branch shake, leaf litter hunt

In pairs or groups

Habitat Survey (30 mins) (additional option)

Investigate the different habitats, decide what might live there, where the things could live in each habitat and discuss whether the habitat is natural or manmade.

14.00 Plenary (whole class back at buildings)

Game/review

Plan of day

What did you see? What did you learn? What did you enjoy?

Wash hands/toilets/collect lunch boxes/goodbyes

14.30 Depart

Suggested learning outcomes

Suggested Learning Outcomes based on the new NC 2014 (Geography and Science KS2)

Children will be able to:

- Use an OS or trail map to locate the River Arun at Chesworth Farm and identify river features
- Describe key features of the River Arun at Chesworth Farm (such as meander, flow, weir, river channel and bank)
- Use a compass to orientate a field sketch
- Use fieldwork to observe, measure and record these features:
River speed by investigation
River landscape by sketch and survey
- Identify and study plants and animals in their habitats
- Use a classification key to help group, identify and name a variety of living things in the local environment
- Discover how human impact has changed / is changing Chesworth Farm to benefit nature

Pre/Post visit ideas

Pre visit ideas for schools

Find the River Arun on road atlas/maps. Follow its course from source to mouth and locate Chesworth Farm.

Look at Chesworth Farm web site and share information with the class.

PowerPoint for visitors (if available).

Post visit ideas for schools

Evaluate the river speed experiment.

Calculate river speed averages from class results.

Calculate river speed in metres per second.

Complete/annotate/colour Field Sketches and compare to photographs (if taken).

Present Nature finds.

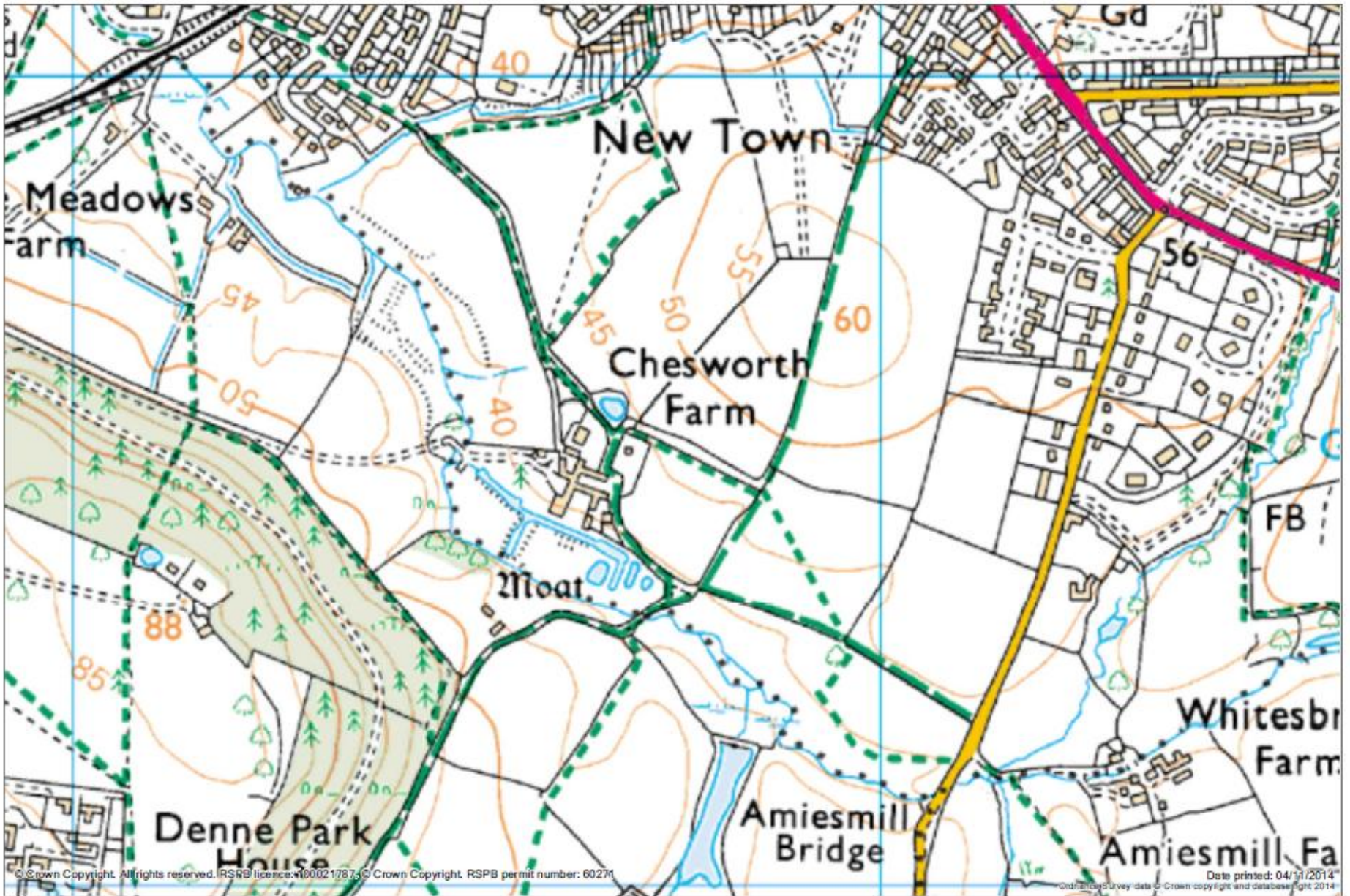
Make a Nature Guide / Visitor Guide to Chesworth Farm.

Prepare a Class Big Book about the day.

Use the Trail Map (if available) to make an annotated map of the site as whole class activity.

Collate whole class results of the Habitat Survey (if done) and prepare display using annotated map, photographs and results chart.

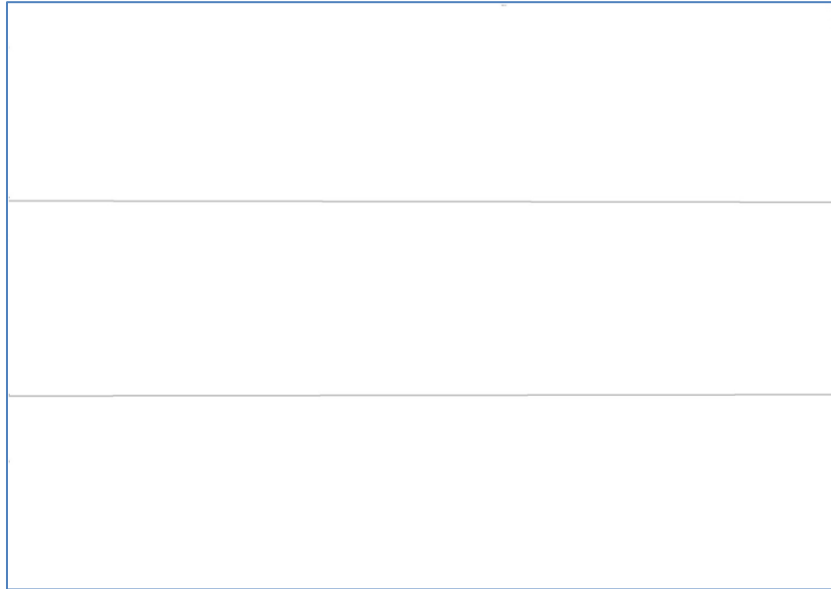
Map



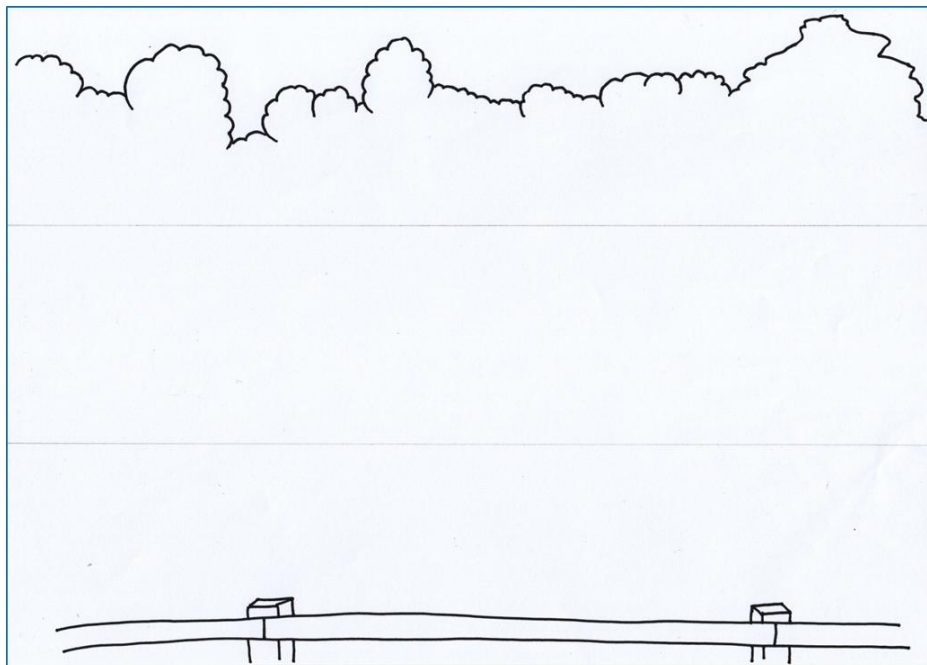
Field Sketch

The following instructions have been written to support the learning of students visiting Chesworth Farm.

Draw 2 lines lightly, approximately dividing the page equally into 3 parts.

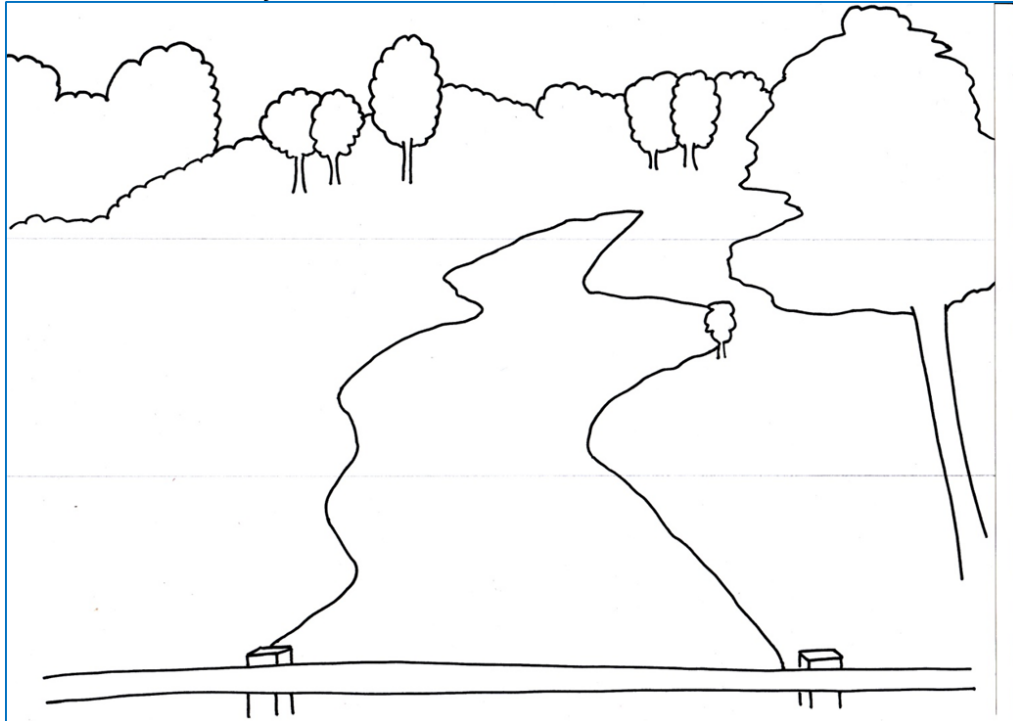


Looking at the landscape, view draw in the HORIZON using the top line as a guide. Draw what you can see in the far distance e.g. Hills at the top. Draw things nearest to you at the bottom of your sketch.

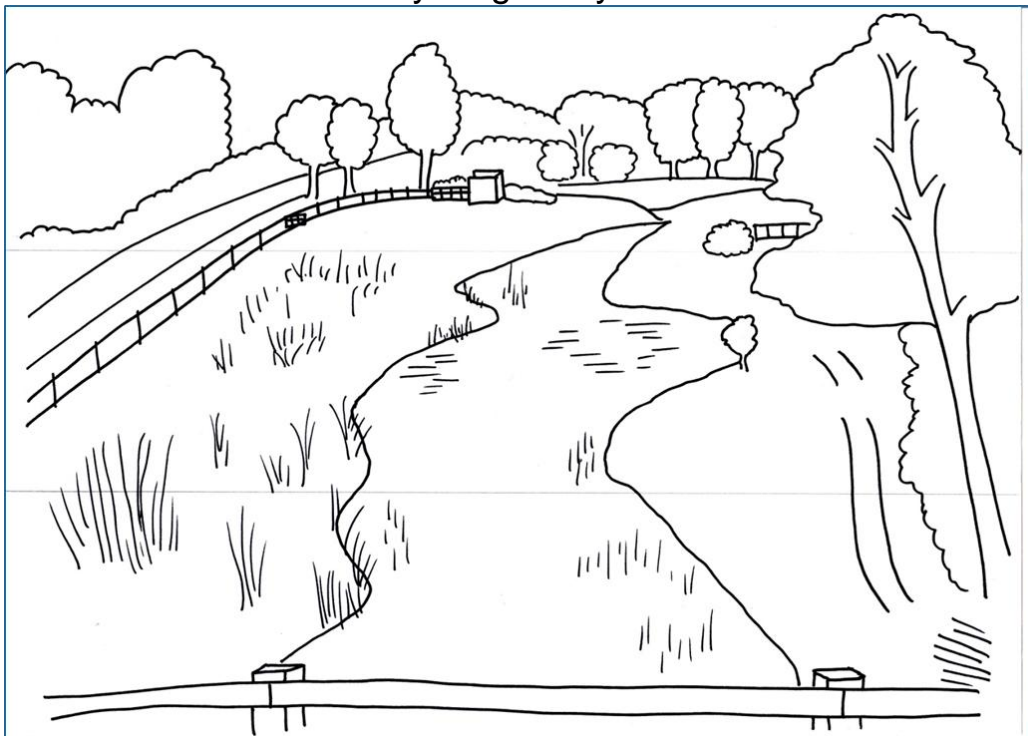


Field Sketch

Draw in the “middle ground” downwards from the horizon line. Remember, the nearer something is the more detail you can see.

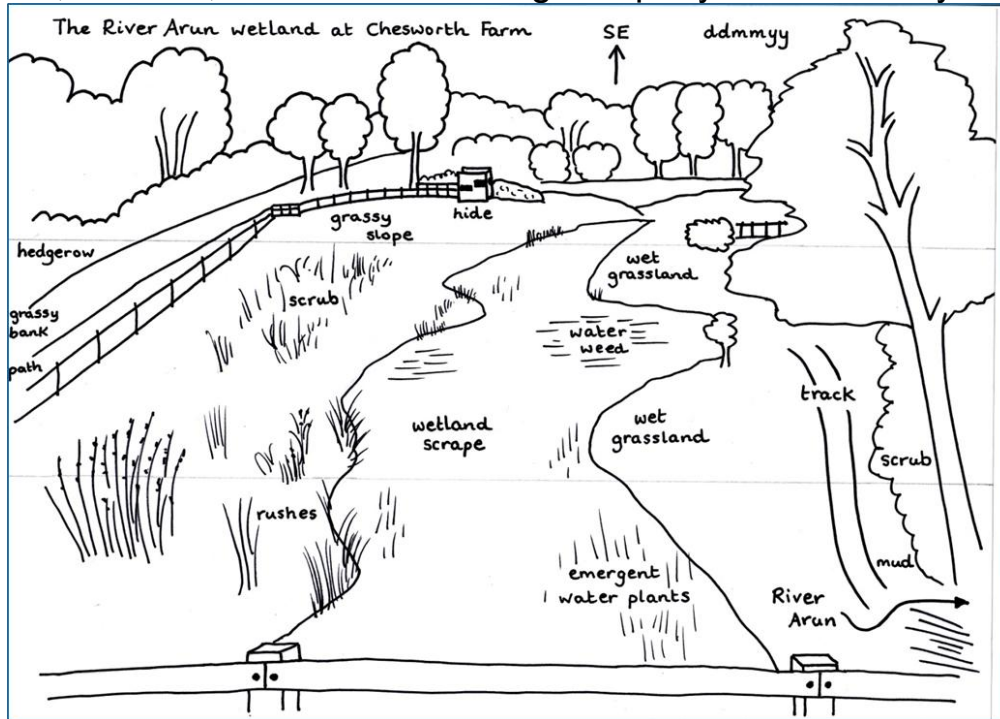


Draw in anything that you can see!



Field Sketch

If it doesn't look like what it should then label it. You can add extra details, such as the place, time, date, weather, direction. Don't forget to put your name on your field sketch.



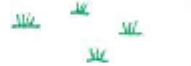
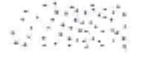
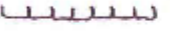
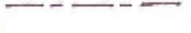


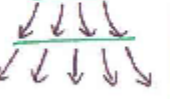
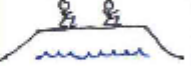








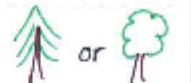






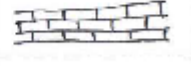
Do you recognise this photo?

Compare this to the field sketch. Why is the field sketch a really useful way of recording this special place?

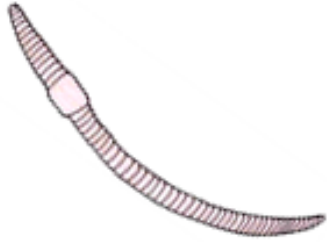


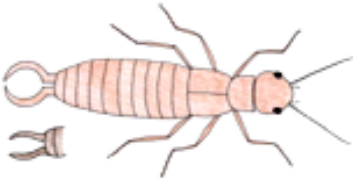





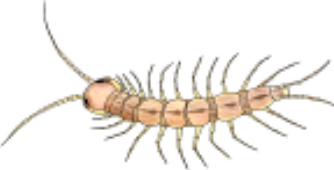



Chesworth Farm River Corridor Survey

















River Corridor Survey Key

| Vegetation | | Deposition features | | Erosion features | | Non-natural Features | |
|------------------|---|---------------------|--|------------------|---|---|---|
| Grass |  | Mud |  | Rock cliff |  | Fence |  |
| Emergent plants |  | Sand |  | Slip slope |  | River crossing: bridge |  |
| Submerged plants |  | Gravel |  | Steep-sided bank |  | ford |  |
| Scrub |  | Cobbles |  | Plunge pool |  | Path/track parallel to river |  |
| Tree |  | | | | | Water control features: weir |  |
| Woodland |  | | | | | sluice gate |  |
| Hedgerow |  | | | | | Dredged bank |  |
| | | | | | | Bank-side defences: soft eg geotextiles |  |
| | | | | | | hard eg concrete |  |


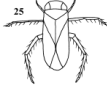

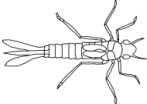

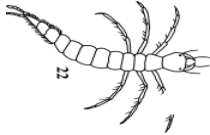
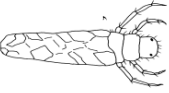



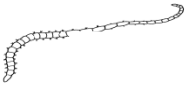


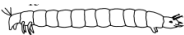



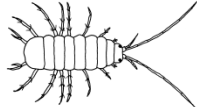




Minibeasts in Woodland and Grassland

| | | |
|---|--|--|
|  <p>worm</p> |  <p>snail</p> |  <p>slug</p> |
|  <p>earwig</p> |  <p>hoverfly</p> |  <p>beetle</p> |
|  <p>harvestman</p> |  <p>spider</p> | |
|  <p>millipede</p> |  <p>centipede</p> |  <p>woodlouse</p> |

Minibeasts in Woodland and Grassland

| | | | |
|---|--|---|---|
|  <p>aphid</p> |  <p>frog hopper</p> |  <p>flower bug</p> |  <p>shield bug</p> |
|  <p>weevil</p> |  <p>beetle</p> |  <p>ladybird</p> | |
|  <p>ant</p> |  <p>cricket</p> |  <p>grasshopper</p> | |
|  <p>moth</p> |  <p>caterpillar</p> |  <p>butterfly</p> | |
|  <p>cranefly</p> |  <p>dragonfly</p> |  <p>damselfly</p> | |

Pond Explorer

| Animals with 6 legs | | | | | |
|---|-----------------------|--|--|----------------------|--|
|  | greater water boatman | |  | lesser water boatman | |
|  | mayfly nymph | |  | damselfly nymph | |
|  | dragonfly nymph | |  | water beetle larva | |
|  | caddisfly larva | |  | water beetle adult | |
|  | pond skater | |  | water scorpion | |
| Animals with no legs | | | | | |
|  | bloodworm | |  | flatworm | |
|  | leech | |  | midge larvae | |
| Animals with a shell (and no legs) | | | | | |
|  | rams-horn snail | |  | pond snail | |
| Animals with more than 6 legs | | | | | |
|  | freshwater shrimp | |  | water louse | |
|  | water mite | |  | water flea | |
| Animals with 4 legs | | | | | |
|  | tadpole | |  | newt | |

Speed of River – Recording Table

Name/class _____

Date _____

| | Measurement | Observations & notes |
|--------------|-------------|----------------------|
| Distance (m) | | |
| Time 1 (s) | | |
| Time 2 (s) | | |
| Time 3 (s) | | |
| | | |

Use this calculation to work out the speed



$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

This means "Distance divided by time"



Don't forget! Time must be measured in seconds.

(There are 60 seconds in a minute)

Example.

If your dog biscuit goes 10 m in 5 seconds, its speed is 2m/s (10m divided by 5 s)
(you say this "2 metres per second")

Speedy Questions

1. How many seconds are there in 1 minute 10 seconds?
2. If the dog biscuit floats 10m in 20 seconds, what is its speed?
3. If a dog biscuit floats 20 m in 1 minute, what is its speed?
4. If an elephant swims 10 m in 1 minute 40 seconds, what is its speed?
5. If an otter swims 20 m in 10 seconds what is its speed?



Answers: 1. 70 s 2. 0.5 m/s 3. 0.33 m/s 4. 0.1 m/s 5. 2 m/s