

8. MAKING YOUR OWN SCIENTIFIC EQUIPMENT

To carry out your investigations there are three pieces of equipment you'll need to make. They're all quite easy and it shouldn't take you very long to put them together.

1 The Transect String

In some of our investigations we want to see how the plants and soil changes as we walk **away** from the river. A **transect** is a line that will show us the ground changes as we move away.

You will need:

- Tape Measure
- 3 pieces of coloured wood
- 10m length of string

- Make sure that your piece of string is **exactly** 10m long.
- By tying the piece of coloured wool firmly onto the string, mark the 1m, 2m and 5m points on your piece of string. These are the points where you will take your samples when you do your transect.

2 The Quadrat

A quadrat is used to sample an area of an exact size. It's very important to use this when comparing several sites. It makes our comparisons **fair**.

You will need:

- 4 pieces of card (each about 65cm long and 5cm wide)
- a tape measure
- 4 butterfly pins or drawing pins

- Using the butterfly pins, join the 4 pieces of card together to make a square. **Use the tape measure to make sure that each side of the square is exactly 50cm long.** (If you use drawing pins, flatten the points against the back of the card using a hammer – see picture.)
- Fold your quadrat up to make it easy to carry.

