

## Background Information

How long will it take for various items to decompose?

The amount of time depends on the material it is made from. Anything that was once living is called organic and will break down at a quicker rate. Organic things can be used to make compost.

Non-organic materials such as plastic, tin and glass take a lot longer and may not break down in our lifetime. See the chart for decomposition rates.

## Teaching Activity

Ask pupils to estimate the amount of time it would take for items to decompose. As you do this, put either the actual items, a picture or a label in the order in which they predict each would decompose, on a time chart.

1. Collect together an example of materials from the equipment list.
2. Label each item – attach it to a piece of string with the label at the other end.
3. Fill the plastic container half full with soil, place all the items in the container and cover them completely with soil (make sure the labels are not buried). Put a lid on the container.
4. Keep the soil moist. Don't let it dry out or freeze.
5. Observe what happens to each item over a 4-week period.
6. Discuss why some things decompose quicker than others.

**This experiment will take 4 weeks to complete**

## Science

### QCA links

#### Unit 3C Characteristics of materials

**Learning objectives.** Children should learn-

- that materials decompose at different rates.

**Learning Outcomes.** Children –

- to Identify how long it takes for different material to decompose.

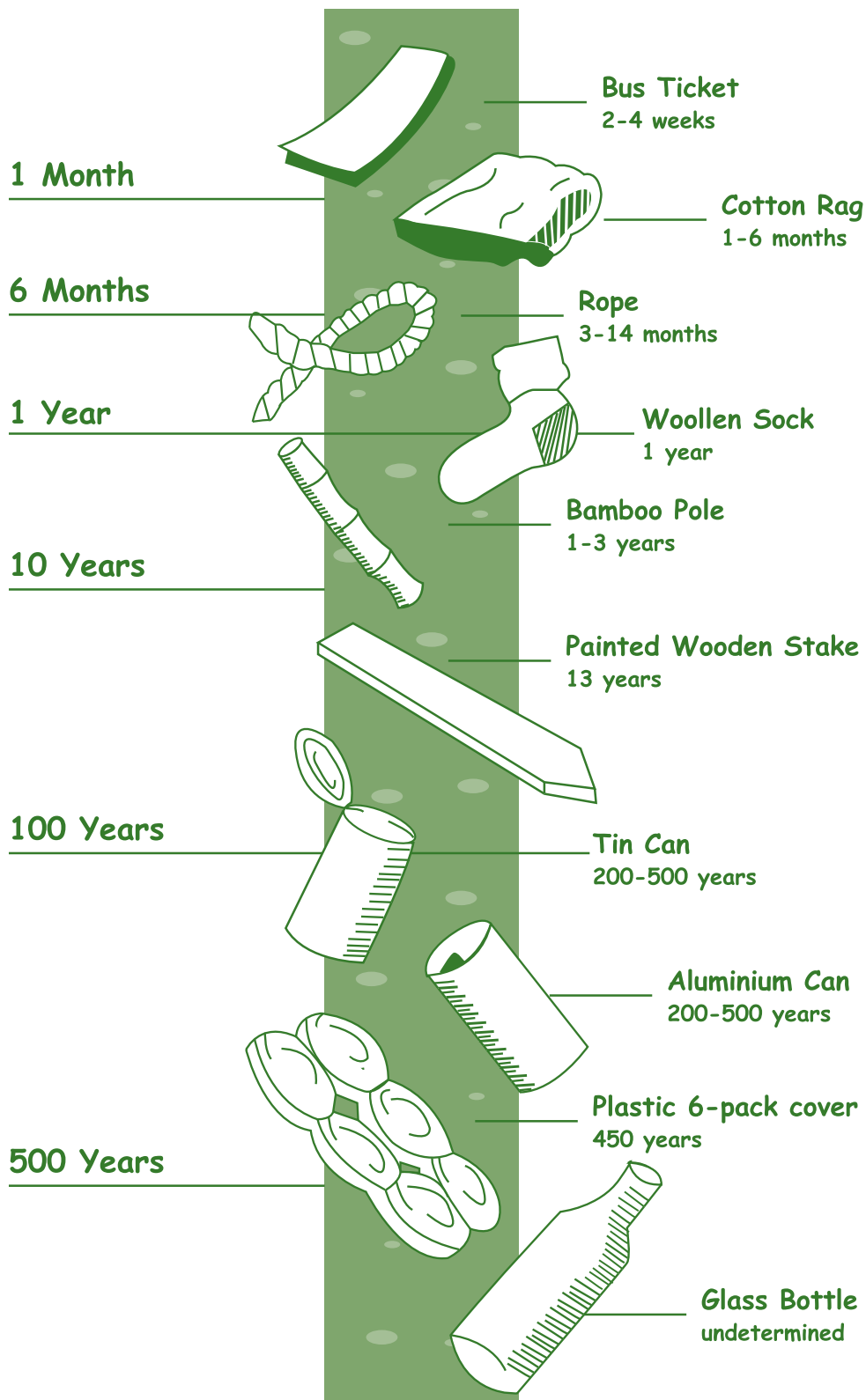


**Art** – Create a time chart display for the classroom.

**Numeracy and ICT** – graphs and chart showing decomposition rates.



# The Rotting Rate Chart



Can you guess how long a crisp packet, plastic carrier bag and a banana skin would take to breakdown?

Make your own rotting rate chart based on your results.