Introductory activity

1 hour

Children consider the first step of any recycling process: sorting and classifying materials, and investigate and sort waste in school.

OBJECTIVES

- To understand the importance of recycling.
- To predict the types of materials that can be recycled and the processes used.

RESOURCES

(Per group of 4 children unless otherwise stated)

- Activity sheets 1 - 4
- Collection of classroom waste for a week Protective gloves
- 5 hoops
- Calculator
- Paper for labels
- Bathroom or kitchen scales

ADVANCE PREPARATION

Collect non-food classroom waste for a week; a bag for each day.

INTRODUCING THE ACTIVITY

This activity introduces the children to the many issues involved in recycling waste. Read through the waste facts sheet (Activity sheet 1) with the class. Divide the class into 9 groups and provide each group with one of the facts cards. The group should then discuss alternatives to the creation of waste described on their card, or ways to promote more recycling or less consumption of a particular material.

MAIN ACTIVITY

Provide each group with a bag containing one day's classroom waste. The children sort and categorise waste into different materials. The hoops are then set out on the floor and labelled by the children. Each group sorts a different day's rubbish and separates each type of material into different hoops e.g. metal, glass, paper, card, plastic, other. It is unlikely that your classroom waste contains glass but it is worth mentioning and discussing the reasons for this and make a comparison with home waste.

They then find the mass of each type of material on the scales and record their results in the table on Activity sheet 3.

If the groups have worked independently, collect, total and share each group's results, so they can all fill in the table and find the total mass of class waste for the week. The whole class could share one set of hoops in which case the first column would be removed from the table.

The children then complete the final two columns of the table to estimate the amount of waste for their class in one year (multiply the mass of waste by the 39 weeks in the school year). They can then predict the total waste for their school in one year (multiply the mass of class waste by the number of classes in the school). The children can make a bar chart of the results using Activity sheet 4.

Discuss the magnitude of the amounts of waste by comparing with other masses they can visualise e.g. one bag of sugar is 1 kg, so the amount of waste produced each year is equivalent to X kg or X bags of sugar.

Discuss the accuracy of these predictions and what factors may change the statistics, e.g. each class is not going to produce the same amount of waste each week, or office or kitchen waste has not been considered, etc.

The children can then predict which items can be recycled and which can not.

Safety note

Children should wear protective gloves when handling rubbish

PLENARY

Revisit and discuss the list of different materials that can be recycled.

The children could produce a poster outlining the issues of recycling which would link to Literacy (discussion or persuasive texts).