



## Lesson 2 – Sharing & Swapping

### Teacher Overview

There are two main activities in this lesson.

#### **Activity 1: Exploring the value placed on unwanted items and perceptions of them**

##### **Aim for the activity:**

- Begin to understand that unwanted items still hold a value
- Understand that items may have more than one use
- Record information into a table
- Transform the tabulated data into a bar graph

##### **Curriculum links for this activity:**

Maths year 5 programme of study – Statistics

- Complete, read and interpret information in tables
- Solve comparison, sum and difference problems using information presented in a line graph

Maths year 6 programme of study – Statistics

- Interpret and construct pie charts and line graphs and use these to solve problems
- Calculate and interpret the mean as an average

##### **Resources:**

- ✓ Unwanted book (one or two) brought in by the students
- ✓ Extra books (these could be used as examples, or if some students forget to bring books)
- ✓ Rubbish Rebels Action Pack
- ✓ Print out the chart in 'Resource 2.1 What happens to it - Recording Sheet' (or make your own)
- ✓ Pencil, rubbers and rulers
- ✓ Graph paper or box lined paper

##### **Activity outline:**

Prior to the lesson - Ask the class to bring one or two books that they no longer need/use/want, which they can give away (making any arrangements you feel are needed to ensure they have their parent or guardian's permission to do so!).

Have a short discussion with the class to find out what they generally do at home with items they no longer want. Go round the class, getting them to tell you what the item is, how they would get rid of it and the reason for wanting rid of it (broken, no longer play with it, have read the book, etc.). Fill in the 'Resource 2.1 What happens to it - Recording Sheet'. You can either do this in groups or fill in one as a class.

Once there are several items (10-20) on the recording sheet, explain how to make the data into a bar graph, pie chart or line graph (whichever is most suited to your class's ability). Guide the students in producing their graph or chart onto the graph paper. They should then cut it out and stick into their Rubbish Rebels Action Pack.

This gives the class a visual view of the data that can be referred to later. You can then talk with the class about your findings.

## **Activity 2: Class Book Swap**

### **Resources:**

- Resource 2.2 Tree diagram, showing paper facts (print and put on the wall)
- Rubbish Rebels Action Pack
- Weighing scales
- Other resources depending on how the class organises the event

### **Activity outline:**

Talk to the class about what the environmental benefits of swapping books are, compared to buying a new one. Use the facts about paper on the tree diagram to work out how much water and carbon dioxide is saved by swapping books. After they have run the book swap they need to record in their Rubbish Rebels Action Pack how many books were swapped and calculate how much water was saved. They can do this by using scales to weigh how much paper was saved.

Use these equivalents for the calculations:

1 litre of water for every 1g of paper

17g of carbon dioxide for every 1g of paper (rounded up from 16.6 recurring)

Once each student has done their calculations and filled in their Action Pack, tot up how much paper, and therefore, water and carbon dioxide were saved by the class book swap. Please fill this in on your evaluation form for the Rubbish Rebels programme.

## **Silver Award Activity**

Conduct a swap event for a whole year group. It can be books, toys, clothes or uniforms. Ask students to bring in 1 or 2 items, and have some as a back-up, in case any students forget to bring something. Allow the students to choose 1 item initially, to ensure everyone gets something, and then allow another item to be chosen if enough are available.

If your school is small and there is only 1 class per year group, you can achieve the Silver Award by swapping something other than books, which you will have done at Bronze level. This can be toys, clothes or uniforms.

Please take photos and estimate the weight of the items swapped, and record this in the Evaluation and Award Application form.

## **Gold Award Activity**

Conduct a swap following the same format as Silver, but for the entire school. It might be worth doing the swaps in year groups to have age-appropriate books, toys, etc.

Please take photos and estimate the weight of the items swapped, and record this in the Evaluation and Award Application form.