



Materials in Motion

Ask the MRF

Did You Know?

A materials recovery facility has over 100 moving parts to it. Each machine or component has a specific role, which when put together can sort over 25 tonnes of material per hour.

Ask the MRF is the second activity in the Materials in Motion range and is ideal for doing after your visit to Gillmoss Recycling Discovery Centre.

This Resource Pack contains an activity with Teachers Notes.

Curriculum Links for this Resource:

- Design and Technology: Design purposeful, functional, appealing products; evaluate their ideas and products against design criteria; explore and use mechanisms
- Science: Use of Everyday Materials

Learning Outcome:

I will be able to identify a range of machines that are used to transport and recover my recycling and ask questions about how they work.





Ask the MRF - Teacher's Notes

This is intended to be a follow-up activity, after your visit to the Recycling Discovery Centre. The class will use roleplay to generate questions about recovery process and will send some of their questions to the MRF Manager.

Activity 1: set up

- You will need to clear a large-ish space in the classroom for this activity; or use the hall.
- Arrange 15 chairs to represent the main machines you saw during your visit to Gillmoss and label these. You might want to refer to the *MRF Teacher's Guide Notes to help*.
- You will need enough space for children to move around the "MRF" and for the remainder of the class to sit on the floor with a good view of the "MRF."
- Have some paper and a pen ready.

Activity 1: ask questions

1. You will need a minimum of 12 'actors': 7 acting as if they are the materials that get delivered (paper, cardboard, food tins, drink cans, glass bottles and jars, plastic bottles and contamination); 2 actors for the pre and post sort cabins; 1 as the baler operator and 2 vehicle drivers. You could have actors for some of the actual processes too, if you wished. The remaining pupils will be watchers - watching what's happening (you can rotate during the activity, so everyone gets a turn acting and a turn watching).
2. Ask the actors to act out a scenario; for example:
 - Bringing the recycling from houses to Gillmoss MRF.
 - Removing contamination from the process.
 - Separating the cardboard.
 - Separating paper from the material stream.
 - Separating food tins.
 - Removing the drinks cans.
 - Removing plastic bags.
 - Baling the paper so it's ready to go to the paper recycling factory.
 - Checking the plastic bottles and baling them, ready to go to the plastic bottle factory.
 - Collecting the contamination and loading this so it can go to the Rail Transfer Station.





3. After each scenario, ask the watchers to describe what the vehicles or machines would be doing if it was real: what would be happening and why? Which parts would be moving? What would they be doing? Ask the watchers what questions they have about what's happening and what the machines or vehicles are doing (it might be, for example, "how do the conveyor belts work?" "how does the baler work?"). The aim is to identify which aspects of the workings of the MRF process the class is curious about. Write down the pupils' questions.

Activity 2: choose 3 questions

As a class, review the questions the pupils came up with during activity 1, and choose the three questions that the class most want to know the answers to (take a vote for example). You will send these three questions to Gillmoss Recycling Discovery Centre. The MRF Manager will do his best to answer them.

Activity 3: send your questions to Gillmoss Recycling Discovery Centre

1. Decide how you will send your class's top three questions to Gillmoss Recycling Discovery Centre. You could:
 - Write letters
 - Record a sound clip or
 - Make a video.
2. Include a return email and postal address so we can reply!
3. Send the class's questions by post or email:
School Questions / Gillmoss RDC
Veolia
Bridgehouse Lane
Liverpool
L10 5HA
Uk.veolia.discoverycentre@veolia.com.

As the Education Officer will forward your questions on to colleagues with relevant expertise, it may take a little while before you receive a reply.

