

## Bin it to Win it! (KS 2)

## PREPARATION GUIDE

Be a contestant in this new science game show and help to save the planet by learning to reduce, reuse & recycle:

- race to sort steel and aluminium cans using the power of an electromagnet;
- discover some of the amazing things we can make from stuff we normally throw away;
- discuss and vote on how we can each improve the way we deal with waste;
- put all this information together in the final frantic *Bin it to Win it Challenge*.

Rubbish might, at first sight, seem like a pretty boring and irrelevant topic to pupils. This interactive show uses a range of techniques to bring important waste management issues to life for them: a quiz format; magic tricks; lots of volunteers; hands-on challenges; and exciting science demonstrations.



### Key concepts and vocabulary

- Our normal waste ends up either being buried in massive holes in the ground, called **landfill sites**; or burnt in massive ovens, called **incinerators**. Neither of these are good ways of coping with our waste.
- There are better ways of dealing with our rubbish - we usually call them the 3 r's - reduce; reuse; recycle.
- **“Reducing”** means using less of the earth’s resources eg buying fewer new things; using less packaging; not buying things that you can only use once. Many scientists think reducing is the *most* important way of decreasing the damage we cause through our waste.
- Many of the things we throw away can be re-used by us or someone else – **“reusing”** means using something again.
- To **“recycle”** means to make something new out of something that has been used before. When we put things that can be recycled in our normal waste bins these valuable materials are lost forever. But not all materials can be recycled as easily as others. In the show, we look at the ways that paper, glass, some plastics and metal can be recycled.
- **small changes by everyone can make a big difference** - whenever we reduce, reuse or recycle, as well as reducing how much rubbish we have to get rid of, we also need to use less energy and fewer of the Earth’s resources to make new things. The *small* changes we *all* make can together make a *big* difference.

Further information explaining the demonstrations and concepts used in the show, with some suggested follow-up activities, can be found in the support notes for this show at [www.think-differently.co.uk](http://www.think-differently.co.uk)