

Approach: Team

Year: 4

Focus: Properties of materials/classification

Resources: Instruction card, recording sheet, 8 meat trays, 2 magnets, 2 jugs of water, 2 bags of 20 different materials: bag tie, blue card, cork, eraser, foam, foil case, netting, paper clip, plastic bag, polystyrene, rubber band, sample cup, shell, spoon, steel wool, stone, string, tin foil, walnut, washer

## Questions / instructions:

In this activity you are going to work together. Here is a bag of different objects. The objects are all muddled up in one bag. Soon, I am going to ask you to sort them into different groups.



### Show students bag of materials.

There are many different ways that we can group objects. You will need to think carefully about how you will group these objects. Think about what materials they are made of and what is special about each object. Think about what they look like and what they feel like. You can also test the objects to see what you can learn about them. We have some

water and a magnet that you can use for this. You need to put these objects into four different groups, and then say why the objects in each group belong together.

First of all I want you to work in pairs. [A1 AND A2] are to work together and [A3 AND A4] are to work together. Talk with your partner about how you are going to group your objects. Talk about why some belong together. What is special about them? Place your different groups on the trays. I will give you a few minutes to group your objects. Then I will ask you to tell the others what is special about each group. Here is an instruction card to help you.

### Read the instruction card.

Here is your equipment for you and your partner to work with.

**Give each pair an instruction card, jug of water, a magnet, 4 trays and bag of objects. Allow time.**

Now I would like you to show the others how you grouped your objects. Tell us what is in each group and what is special or different about that group. I will write down what is in each group when you are ready.

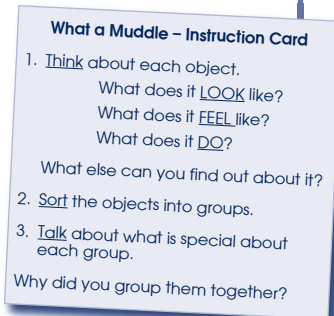
**Allow time. Record answers after pairs have shared.**

**Put 1 set of equipment aside, and mix other set for giving to team.**

Now I want you to work as a group. This time you have one set of objects. As a team, decide on what is the best way to group these objects into five groups. Put your groups on the trays,

**Give students instruction card, 1 set of objects and 5 trays.**

Remember you need to think about what objects belong together.



What is special about each group? Why is it different from the other groups?

You have a few minutes to group your objects. Then I will ask you to tell me about your groups.

**Allow time. Record group answers**

### Judgements based on team decisions:

#### Descriptions of groups –

**group 1:** all items clearly fit description 18 (19)  
items fit description quite well 71 (69)

**group 2:** all items clearly fit description 16 (21)  
items fit description quite well 76 (69)

**group 3:** all items clearly fit description 15 (19)  
items fit description quite well 76 (71)

**group 4:** all items clearly fit description 14 (17)  
items fit description quite well 72 (67)

**group 5:** all items clearly fit description 24 (22)  
items fit description quite well 62 (59)

#### Coherence of groups –

**good:** all items in group fit together and none in other groups fit

**moderate:** all items in group fit but one or more in other groups also fit

**group 1:** good 18 (22)  
moderate 49 (50)

**group 2:** good 12 (22)  
moderate 57 (54)

**group 3:** good 18 (28)  
moderate 50 (46)

**group 4:** good 17 (17)  
moderate 51 (48)

**group 5:** good 27 (26)  
moderate 46 (46)

**Total score:** 20–25 3 (9)

16–19 37 (29)

12–15 43 (48)

8–11 14 (12)

0–7 3 (2)

% responses  
2003 ('99)

year 4

### Commentary:

This was a demanding task that resulted in a wide range of team performances. There was very little difference between 1999 and 2003.