### **B5.1 Recycling old materials**



Your sister, Mia, draws a picture on a sheet of paper. She doesn't think the picture is very good and she wants to throw it directly in the paper bin. You say to her,

"But Mia, that's a total waste of paper! You could draw another picture on the other side or think of a craft you can do with the paper. For example, we can make sandals from old paper. Should I show you how that goes?"



Figure 1: A stack of scrap paper.



#### How can you make sandals from old paper?



#### Write down your ideas and guesses:

## You need the following for the experiment:

- 2 to 3 old newspapers("scrap paper")
- □ Packing tape



Figure 2: Required materials.



#### How to set up the experiment:

Lay out all the materials as shown in the photo.



#### How to conduct the experiment:

- 1. Fold the newspaper pages into several strips measuring approximately two centimeters wide.
  - To do this, always place two pages on top of each other and start folding along one edge. Fold the paper over in alternating directions every two centimeters.
  - Do this until the newspaper page is a paper strip.
  - Secure the last fold with a piece of tape.
  - You will need several of these strips, depending on the size of your feet.
- 2. When you have enough paper strips, coil them tightly into an oval shape.
- 3. To hold everything in shape, secure the end with tape.
- 4. If the paper coil is still too small for your foot, you may need to roll a second coil and connect the two together.
  - The sole of your sandal is now finished!
- 5. For the straps, fold a paper strip that is a bit thicker than the previous strips.
- 6. Securely tape all parts together, and your sandals are ready to wear.



Figure 3: What your paper sandals could look like.



#### Write down your observations:

How much paper did you need for your sandals?

Compare the stability of your sandals with the stability of the shoes you normally wear.

What do you notice?

Are your sandals comfortable?

•	Are they soft or firm? What situations are they suitable for? What situations are they not suitable for? When would you be less likely to wear them?
	Evaluate your observations:
1.	What materials could you use to improve your sandals made from scrap paper? Perhaps you also have ideas of how you can decorate your sandals with other "trash"? Write down your thoughts.

2.	Guess what else can be made from recycled materials and write down your guesses.



# Doing further research:

Many artists resurrect "trash": They make works of art from "trash." Try it out: Create								
a work of art using various materials that you would otherwise throw away. Use scissors, glue, and tape.								
The space below is for a drawing of your artwork:								