



Module 4

What can you make?



SHORT DESCRIPTION

Module 4 is focussed on recycling and reusing materials. The bicycle is still the central element of the class, since the pupils are invited to use old inner tubes and other accessories to turn them into new items such as pencil cases, wallets, necklaces and key chains. The pupils work in team and develop their creative skills, while they get the idea that not all used materials become trash, but they can come to new life through re-use and imagination.

EXPECTED LEARNING OUTCOMES

English vocabulary	Words related to the different parts of the bicycle
English grammar	Let's do this!
Complementary skills	Teamwork
	Manual and creative skills
	Environmental awareness

BEFORE THE CLASS

There is quite a lot of preparation to be done for Module 4. First of all, old inner tubes have to be collected, opened and washed. Then they have to be measured in order to make sure that there is enough material for all pupils.

One pencil case needs about 40cm (wider type), a keychain circa 20cm (racer bicycle type). For the necklaces, each student needs about 40cm of black string. If you have the budget for it, you may prepare them with locks, or otherwise tie them together as shown in the picture. To decorate the necklaces you only need spare pieces of inner tube. See LEARNING and INTERACTION for further explanation on how to make the items. A lot of tips can also be easily found online. The idea is that all the kids make at least one object each.



For the lesson, prepare four kits, including:

1. Glue (liquid), glue plates, brushes and hole punchers
2. Material for pencil cases: elastic string and felt tissue
3. Necklaces (string) and key chains

Prepare material for 4 “make stations”:

- Inner tubes for pencil cases
- Scissors
- Meters (2-3 per group)
- Hole punchers (ideally one per group)
- Markers or pens to mark the holes to be made
- Elastic string

Keep the felt tissue for decoration aside until it is to be used.

Prepare the Demo wall, but keep the shapes with you for Activity 1.2. For this module, you need an empty sheet to write down the “Action list”, in addition to the demo sheets.

1. WARM-UP

Activity 1.1

Body parts

Description

As usual, the children stand in a large circle at the beginning of the class. The teacher asks the children if they know where their head, shoulders, knees, legs, toes (etc.) are. Ask them to touch the parts while repeating the words. Next, let the kids instruct, e.g. "Touch your head". Let each student instruct once.

Time needed

5-10 minutes

Activity 1.2

Mimic the shapes

Description

Using their bodies, the mechanic and teacher show how to make a circle, square, rectangle etc. Make the students work in pairs. Say the name of a shape (square, triangle, rectangle, circle, heart, star) and let them find a way to make it together. Use the Demo Sheet to point at in order to make sure they understand what they are mimicking.

Time needed

5-10 minutes

Materials

- Demo Sheet Shapes ([Annex 4A](#))

2. LEARNING

Activity 2.1

What can you make?

Description

Call the kids to the DEMO wall/corner and hand out the Tools and Materials Map ([Annex 4A](#)). As in the previous modules, the teacher hands out the material maps and goes through the vocabulary, supported by the mechanic who shows the tools one by one.

Next, the mechanic start demonstrating how to create a pencil case using pieces of old inner tubes, elastic string and a hole-puncher. During the demonstration, the teacher writes down the steps on the "action list".

Action list for the **pencil case**:

1. Cut 40 cm of the inner tube
2. Fold the inner tube (leaving a flip cover at the top)
3. Mark out five holes on each side
4. Make the holes
5. Cut two pieces of 25 cm elastic string
6. Make one knot at the end of each string
7. Sew together
8. Make two holes at the corners of the "flip cover" to be able to close it
9. Decorate!



Action list for the **keychain** (optional):

1. Cut 20 cm of inner tube (the narrow one)
2. Cut it in half along its length
3. Cut two pieces of 7cm string
4. Fold the inner tube around the keychain
5. Make two holes at each side of the strip
6. Put the string through the hole and make knots

For the **necklace**, you just need to use pieces of an old inner tube, washers and bolts.

Time

40-45 minutes

Materials

- Demo Sheets Module 4 ([Annex 4A](#))
- Whiteboard pen
- Students' tools and materials map ([Annex 4B](#))
- Pens to distribute

FOR THE PENCIL CASE:

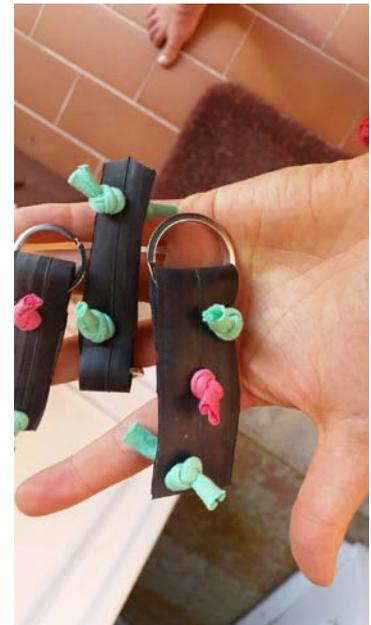
- Used inner tubes (wide type, 40 cm per student, cut open and washed)
- Elastic string (2 x 25 cm per student)
- Glue
- Glue plates
- Brushes
- Hole punchers
- Felt tissue

FOR THE KEYCHAIN:

- Used inner tubes (narrow type, 20 cm per student, cut open and washed)
- Elastic string (2 x 10 cm per student)
- Keyrings

FOR THE NECKLACES:

- Necklace string (40 cm per student)
- Washers and nuts
- Spare pieces of inner tube
- Optional: steel locks



3. INTERACTION

Activity 3.1

Making teams

Description

Line the kids up, then give them different shapes, e.g. CIRCLE, TRIANGLE, SQUARE AND HEART. Try to check that they can work in pairs to help each other (this is needed for example for the hole making). If groups are uneven, make one group with three and be ready to help out.

Time

5 minutes

Activity 3.2

Let's create!

Description

Following the steps explained in Activity 2.1, let the kids make the pencil cases, while walking around to help them. It might be too difficult for the students to make the holes themselves (and too time consuming). Let them try however, and help out if you see that it is not feasible.

If there is any time left, let the kids choose what else to make, either a keychain or necklace or whatever their imagination can suggest.

Time

30-40 minutes

Materials

- See materials used in Activity 2.1

4. PRACTICE

Activity 4.1

Clean up

Description

Divide the kids in “cleaning teams”, i.e. each group is responsible for collecting different items. Inner tubes, scissors, glue, felt etc. This way they practice the names once more. They can line the items up on the tables in the classroom or on the floor in different piles.

Time

5 minutes

Activity 4.2

Worksheets

Description

Distribute the worksheets and explain the exercises. Do them together in class if there is time, or give as homework.

Time

5-15 minutes

Materials

- Worksheets ([Annex 4C](#))
- Pens to distribute