

# SCHOOLS FOR A GREENER EUROPE

ERASMUS+ KA229 PROJECT No. 2020-1-SK01-KA229-078252 2020-2023

# IDEA BOOK









# INTRODUCTION

We only have one planet on which we live. The planet is full of resources, some renewable and some not, but unfortunately, we have an evergrowing population that poses a huge threat to all these resources. That is why it is very important to do something

This booklet is an outcome of the Erasmus+ KA229 project "Schools for a Greener Europe", whose main objective is to reduce the ecological footprint through environmental activities performed by students, teachers and local communities.

The five institutions which joined their efforts to achieve this aim are:

- **Zakladna skola Slobodneho slovenskeho vysielaca**, Banská Bystrica, SLOVAKIA (coordinator)
- Şcoala Gimnazială Nr.7, Giurgiu, ROMANIA
- Escola Básica Integrada de Arrifes, Ponta Delgada, PORTUGAL
- Cesu Valsts Gimnazija, Cesis, LATVIA
- Istituto Comprensivo Giovanni XXIII, Terrasini (Sicily), ITALY

In this book we are presenting a series of activities that students performed, in order to show some ways of recycling waste and protect the environment.





# Zakladna skola Slobodneho slovenskeho vysielaca, Banská Bystrica SLOVAKIA



# Beeswax wraps /see Appendix 1/

# **Ingredients**

#### 35cm x 35cm sheet:

- 2 tablespoons grated beeswax
- 2 teaspoons organic jojoba oil
- 100% cotton fabric (35cm x 35cm)

### Equipment

- scissors (pinking shears )
- cheese grater
- baking sheet
- parchment paper
- tongs
- oven

#### Instructions

- 1. Preheat your oven to 110°C.
- 2. Cut your fabric into the sizes you prefer. Use pinking shears to prevent fraying).
- 3. Lay a piece of parchment paper over the baking sheet, and then place your fabric on top. Sprinkle grated beeswax and jojoba oil evenly over the top.
- **4.** Place the baking sheet in the oven and bake until the beeswax is fully melted. It can take between 5-10 minutes. **Do not leave your beeswax wraps alone, you need to watch it!**
- 5. When the beeswax is evenly melted, remove the baking sheet from the oven and lift the sheet with tongs. Wave the beeswax wrap in the air to allow it to cool enough to touch (it doesn't take long) then hang it somewhere so that it can "set."

**Notes:** You can use your beeswax wrap instead of a cling film, a plastic or paper bag. You can use it as a lid or wrap your sandwich in it. After its service life you can simply throw it into a compost bin, because it is completely degradable.

# Luffa Growing/see Appendix 2/

### You need:

- Luffa seeds
- Some yoghurt pots
- Potting soil for growing seedlings
- Water

# **Description**

- 1. At the beginning of May, we planted luffa seeds in the yoghurt pots (one seed in a pot). Luffa seeds were previously soaked in water for 24 hours. Some seeds started to germinate after a few days, some of them after three weeks.
- 2. At the end of June, the plants were strong enough to transfer them outside in the garden. The seedlings were planted 30 cm apart from each other.
- 3. We built plant supports for our luffas, because it is a climbing plant and can grow very tall (up to 3m).
- 4. Luffa needs well-drained, but moist soil and a lot of sunny days. We took care of them and watered luffa the whole summer.
- 5. During the summer it bloomed with both male and female flowers and at the end of August, the first fruits could be seen.
- 6. In September it was the right time to remove all the rest of flowers so that the force would only go into the fruit.
- 7. In the middle of October we harvested all luffas even though they were not mature yet. Luffa should be harvested when its skin is brown and dry. In our climate, however, it is not possible to get to that stage due to a short season. Nevertheless, it is possible to obtain sponges from immature luffas.
- 8. Subsequently, we peeled luffa's green skin and squeezed the pulp with the seeds. We only had fibres left sponges, which we then put in the dishwasher to get rid of the last bits of the pulp and let them dry in the sun.

**Note:** Luffa is a thermophilic, annual plant from Asia that is grown for its cylindrical fruits. These are used when still immature (when they are about

12cm long) for eating. After ripening, their dried pulp, consisting of spongelike fibres is used. The sponges can then be used for household cleaning or in the bath.

# Luffa Sponges /see Appendix 3/

#### Material

- dry luffa
- old towel
- bias tape (a narrow strip of fabric cut obliquely and used to bind edges)
- elastic tape (for trousers, shorts...)
- scissors
- sewing machine
- thread for sewing machine

### **Instructions**

- 1. Cut the luffa lengthwise and open it so as it is flat. Cut out a circle with diameter of 10cm from luffa.
- 2. Cut out a circle with diameter of 10cm from a towel, too.
- 3. Join both circles together. Hem them with a bias tape. Cut a 10cm long stripe from the elastic tape, place it on the towel circle and insert its ends under the bias tape and sew together. The elastic stripe serves as a handle and you can put your hand under it when showering or cleaning.

**Note:** To create luffa sponges you can use an easier method. Cut the luffa crosswise into smaller pieces and hang them on twine.

# **ECO bags for fruit and vegetables** /see Appendix 4/

### Material

- sheer fabric (can be an old sheer curtain)
- Aida cloth (Java canvas- used for cross-stitch embroidery)
- embroidery threads (different colour according to

- fruit and vegetables cross stitch patterns (see enclosure)
- needle
- scissors
- long string (to close the top of the bag)
- safety pin
- sewing machine

### **Instructions**

- 1. Start by embroidering a picture of a fruit or vegetable according to the template. Embroider the picture on Aida cloth.
- 2. Cut out a 25x30cm rectangle from the sheer curtain.
- 3. Optically divide the rectangle into two halves and place the embroidery in the middle of the upper half of the curtain, pin it and then sew it on the sewing machine with a hemming stitch. The colour of the hemming stitch thread should be the same as the one used for the embroidery. It looks nice.
- 4. Sew around the entire rectangle with a hemming stitch to prevent fraying.
- 5. Fold the curtain in half, with the embroidery on the inside, pin two sides and sew them both together to create a bag.
- 6. Bend the upper edge of the bag by 2 cm and sew, so that a tunnel for the string is formed. Do not sew it all the way to leave an opening for stringing.
- 7. Using a safety pin, thread the string 2 times into the created tunnel so that it can close the bag.

**Note:** Take your Eco reusable bags with you when shopping. Do not use plastic bags for fruit and vegetables. And create ZERO-waste.

# An old chair makeover /see Appendix 5/

### Material

- old wooden chair
- sandpaper
- white acrylic paint for wood

- paint brush
- paper napkins with patterns/paper for decoupage
- decoupage varnish and glue
- Scissors

### **Instructions**

- 1. Clean the chair first. Remove any debris and grime from the chair. Let it dry.
- 2. Lay down newspaper under the chair on the work surface. Ensure that there is plenty of room to move and that it is well ventilated.
- 3. Sand the chair with sandpaper. It is important for the chair to be smooth and old paint taken off. Brush away the sanded wood dust and clean up the area.
- 4. Paint the chair with white acrylic paint for wood. Paint at least two to three layers to coat the entire chair evenly. Allow to dry in between each layer. Paint in well-ventilated space.
- 5. Plan the decoupage design. Cut out chosen images from the napkin and place them on the chair seat, back or legs and arrange until you like how it looks. Take a digital photograph of it or do a quick sketch of where each piece is to be placed.
- 6. Separate the napkin layers and use the top one.
- 7. Paint the area where you are going to stick the piece onto the chair with glue.
- 8. Affix the pieces to the chair in the appropriate placement for your design. Press down on each part of the paper piece to prevent bubbles or wrinkles from forming.
- 9. Leave it to dry for 12-24 hours (read also instructions on glue).
- 10. Finish by painting a layer of decoupage glue over everything glued on. Let this dry and do another layer.

# Appendix 1





# Appendix 2





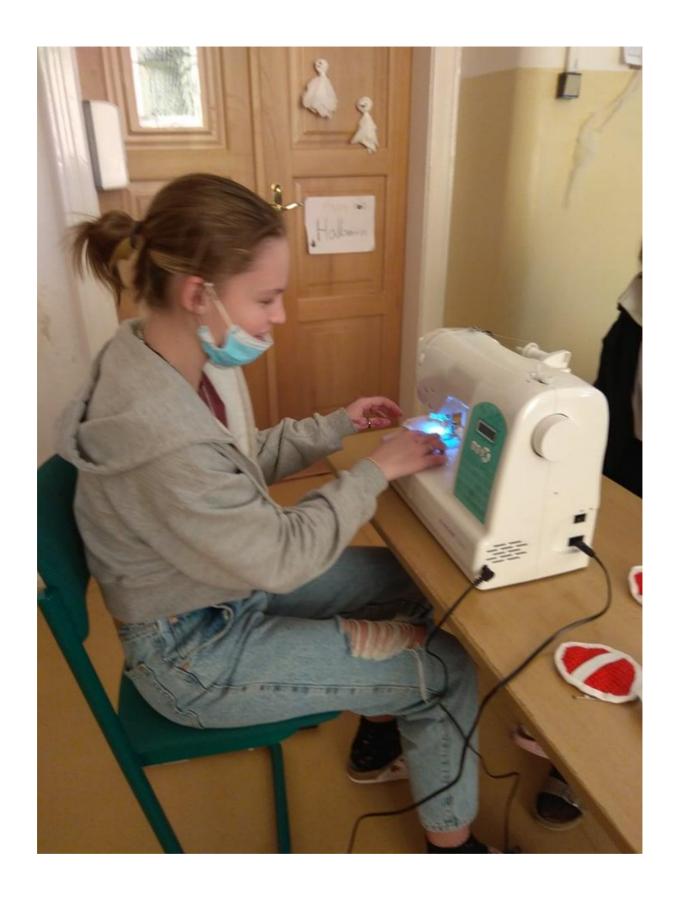




# APPENDIX 3









# Appendix 4





# APPENDIX 5











# ȘCOALA GIMNAZIALĂ NR.7 GIURGIU ROMANIA



# 1. PAPER RECYCLING (1)

This is a recycling idea which our school learned form a former Erasmus partner and we have applied it since then, either in school or at home.

For this, you need:

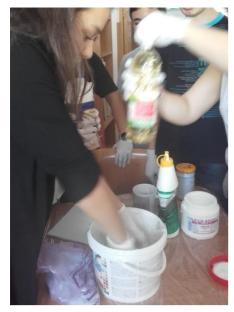
- -recyclable paper
- -oil (preferable olive oil but any other kind is good)
- -wood glue
- -flour

### Procedure:

- 1.Tear the paper you want to recycle in small pieces and put it to soak in water for a few hours.
- 2. Then take the paper aut of the water and put it in a blender. Mix it until you get a past.
- 3. Squeeze the past and mix it with the oil, glue and then add flour to make a dough, hard enpugh to allow making different shapes (masks, bracelets, brooches, earrings, etc)
- 4, Leave the objects to dry and then paint them.

















# 2. PAPER RECYCLING (2)

This is a recycling activity in order to make flowers from eggs cardboard.

Students make different objects using flowers from eggs cardboard, using glue or glue gun, scissors and paint.





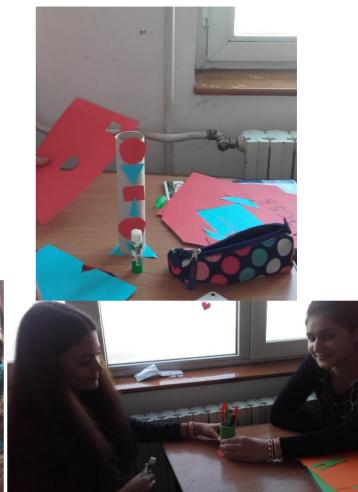


# 3. PAPER RECYCLING (3)]

Students made different objects using paper and cardboard: pen holders, photo frames, etc.









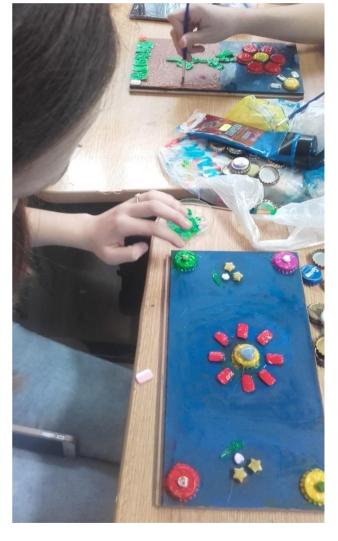
# 4. PLASTIC RECYCLING

In order to recycle plastic, students made different pictures from plastic bottle lids or metal lids. They stuck the plastic and metal lids using glue gun or silicone glue.











## 5. CREATING TEACHING MATERIALS FOR CHEMISTRY

During the optional class "Recycle and Protect Nature", which started as an outcome of a former Erasmus+ project and it continued over the years, students created different objects used at the Chemistry classes, using coins or paper:

















# Escola Básica Integrada de Arrifes Ponta Delgada PORTUGAL



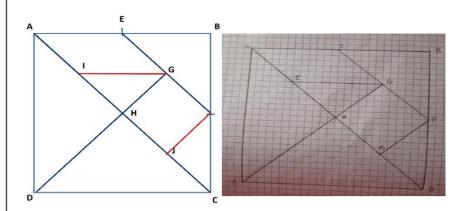
# 1. Construction of a tangram (Chinese Puzzle)

# • materials:

paper; parchment paper; cardboard (cereals, ...); ruler; pencil; scissors; colored pencils.

# how to make:

build the Tangram, using the given measurements; transfer the drawing to tracing paper; transfer the drawing from tracing paper to cardboard; paint each piece in a different color; cut each piece







have fun "building" different









# 2. Reusing newspapers

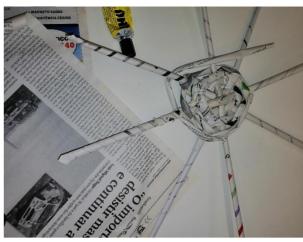
### • materials:

- newspapers;
- glue;
- fine stick;
- paints.

### how to make:

- define what project you intend to create (basket, vase, base for pots, ...);
- take a sheet of newspaper and start rolling one of its corners, with the help of a thin stick. Roll it diagonally to create a straw;
- repeat this action to make a large number of straws;
- if you want to make a base, start rolling the straw and stick it to make sure the work is safe or arrange 3 straws (like circumference ray) and intertwine with another straw until you reach the shape you want;
- if you want you can paint with paints, but for this you also need brushes and containers for paint and water. Paint and let it dry and you can have a beautiful basket to put the fruit.









# 3. Turning cans into organizers

## materials:

- cans;
- scraps of fabrics, paper, ...;
- scissors;
- glue.

## how to make:

- wash the can well:
- remove the paper that is usually glued to the outside of the can;
- measures the can;
- cut the fabric/paper with the already known measurements;
- glue the fabric/paper around the can;
- decorate with whatever materials you like;
- you can repeat the process and glue the cans together to better organize your materials.







We can also decorate cans, plastic bottles, yughurt cups and turn then into beautiful vases.





# 4. Christmas tree with corks

- materials:
- cardboard or plastic bottle;
- cork stoppers;
- scissors;
- Glue;
- how to make:
- make a cone with the cardboard or use the bottle;
- cut the corks in order to have a flat part;
- stick the corks upwards until you reach the top;
- decorate as you like, reusing whenever possible.







# 5. Stars with toilet paper roll

# materials:

- toilet paper rolls;
- pencil;
- ruler;
- scissors;
- Glue;
- paints;
- glitter;

# how to make:

- fold the toilet paper roll to create a rectangle;
- with the help of the ruler, make strips of 1 or 2 cm;
- cut the strips;
- fashion the strips to create a star point;
- put glue on one end of each point of the star;
- glue each end of the star around a center;
- decorate as you like.















# Istituto Comprensivo Giovanni XXIII, Terrasini (Sicily) ITALY



## Students' projects.

From December 2022 to January 2023, students worked on making a step by step tutorial creating something with recycled materials. This activity aimed to teach students that they can make something beautiful or useful with material that is cluttering their home and that otherwise wouldn't have any use. they gain awareness about the importance of the three Rs.

They also learned how to do a step by step tutorial in English.

Some of the Christmas items created by students were sold for the Christmas school lottery to raise funds for the school.

Special needs students guided by their teachers made Christmas decorations from recycled cardboard for the school's Christmas party.



#### 1. BOB THE DIGITAL TREE

Hi! We are Leonardo and Elia and today we will show you how to transform a little USB drive into a little tree. We called it: Bob the Digital Tree

To craft Bob the Digital Tree we will need:

- -A USB drive (with a cap to close it\*)
- -Tape
- -A green marker
- -A brown pencil
- -A used piece of paper
- -Scissors

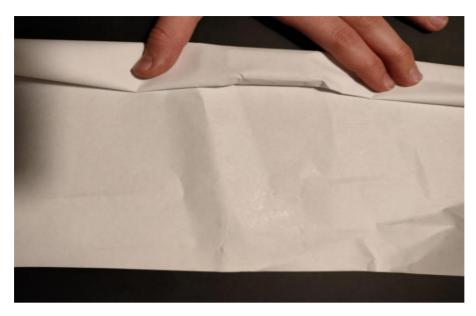
\*Note: we didn't have a USB drive with a cap, so we used a little toy that is of the same size (top right of the photo)



-Step 1: take the USB drive and put it on the edge of some used paper



Step 2: roll the paper sheet over with the USB drive like in the photo



-Step 3: cut the excess paper off and put the USB drive away so that you will have a little paper cone.



-Step 4: Put some tape to keep the cone together.



-Step 5:

Color the cone with the brown pencil to make it look like a tree trunk.



-Step 6: Close one end with tape and insert the USB drive.



-Step 7:Take the leftover paper from step three and crush it into a ball





Step 8:

Color the ball green with a marker

-Step 9:

Attach the ball use the tape to put it together with the USB cap

-Step 10:

Make some space in the bottom part of the ball to the USB cap with a piece of tape

And now congratulations! What you have in your hands is Bob the Digital Tree!



I hope you enjoyed :)

# 2. Reusable shopping bag - No sewing

Class project: 2A

## What you need:



- An old T-shirt you don't wear anymore



- scissors

## Step 1.

Lay the T-shirt flat on a table and smooth out all the wrinkles and cut off the sleeves. To make cuts even fold in half.



**Step 2.**Cut out the neckline.



Step 3
Scrunch the bottom and tie a knot and then turn your T-shirt inside out.



Seriously ...it's that simple!

### 3. THE PINE CONE TREE

By: Giorgia, M. Grazia e Daiana

To make this project you'll need: a pine cone, some paint (you choose the colour), a paper cup, glitter, a small bow, a small star or a small piece of yellow festoon.



step 1. Paint the pine cone and let it dry



step.2 Cut a paper cup so it fits the base of the pine cone.



step 3. Paint the cup and let it dry.



step 4. Glue a bow on the base



step 5. Glue the pine cone on the cup

step 4. Glue a star or a small piece of gold festoon on the top of the pine cone. Now cover with glitter to make it look pretty.

### 4. THE NATIVITY SCENE

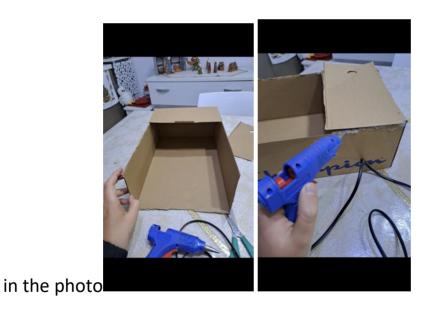
# **By Antonio and Marco**



Step 1.

Cut out the lid ( if attached) and the bottom base.

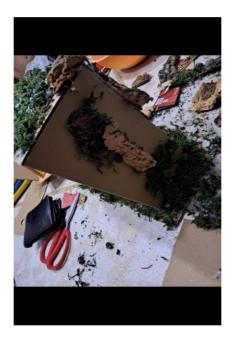
Step 2. Cut out a rectangle to and glue it on the top front of the box like



Step 3: Cut out an arch



Step 4 Cut into pieces some bark and moss



Step 5. Glue the moss and bark on the sides of the manor and on the roof.



Step 6.

Cut out from a book or draw three figurines of Jesus, Joseph and Mary and glue them to the base inside the manor



Step 7. Add a shooting star-like the one in the photo

Step 8. Now it's ready to be displayed



Special needs students made Nativities using recycled material and learned about the importance of recycling to lower the impact we have on the planet.







# Cesu Valsts Gimnazija Cesis LATVIA



### 1. BUNNY PENCIL HOLDER

## by Armand

### You will need:

- Empty "Pringles"can
- Hot glue
- Scissors
- Markers or pencils
- Paper (2 pieces)



1. Cut the "Pringles" can in half.



2. Smoothen the can's edge.





3. Cut the paper in half so that one edge is the width of the can's height.



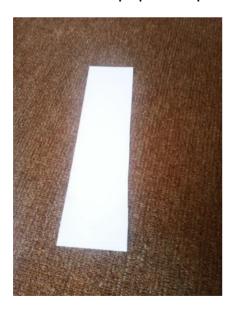
4. Glue the paper strip on the can.



# 5. Cut off the excess edge.



6. Fold the other paper strip in half.

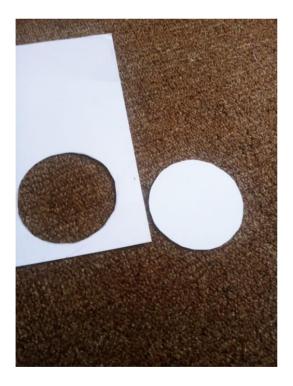




# 6. Cut out ears for bunny



7. Cut out a circle in same diameter as the can's bottom.



# 8. Glue the ears on the can.



9. Glue the circle on the ears.



# 10. Colour the bunny's face and ears.



THE FINAL RESULT:



Hope you enyojed! Try with kids!



# 2. MAKE A EASTERDECORATIONFROMA TOILET PAPER ROLL By Evelina

Things you will need:

Toilet paper roll



Christmas golden chain



Craft googly eyes



Yarn



Paper clips(2)



Hot glue



Marker, ball



First step

The first step is to glue on the yarn to the roll, so that it does not fall off.





## Second step

The second step is to put the paper clips on the edges of the roll, and to color the nose.





Third step

The third step is to glue the eyes, nose and the tail.







### Conclusion

■Things that are around us aren't always useless, but we don't see that. In my opinion there are many things that can be useful in everyday life, we just have to pay attention and be creative, so we don't have to waste so many things but make something out of them.

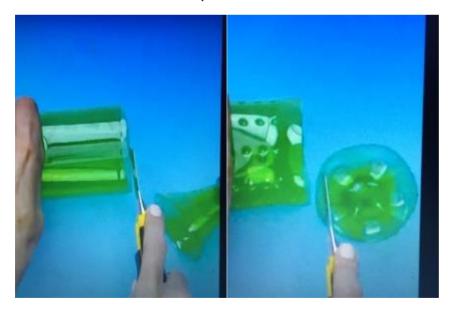
# 3. Cute vase flower By Jurevica

You will need:

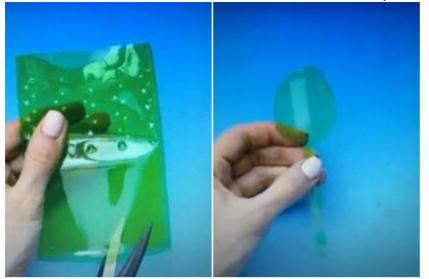
- Sprite bottle
- Paper knife
- Scissors
- Sharpie (that you don't use anymore)
- Green ribbon
- Scotch
- 1. Take your Sprite bottle, and remove the tag.



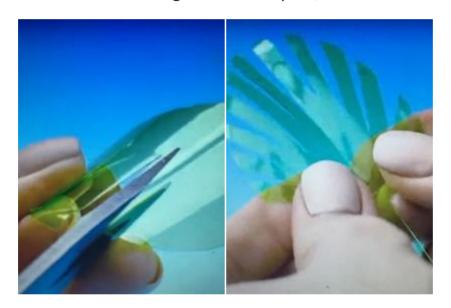
2. Cut off the top and the bottom of the bottle.



3.. Then flatten the bottle and cut out these "spoon" looking shapes.



4. Then start cutting the around part, till it looks like a leaf.



5. Make them as much as you want!



6. Then take your sharpie and roll your green ribbon around it, and start putting in the leaves.



7. It should look like the first picture. Then get vase or anything where you can put your palm flower in!



8. The result: You have your cute vase flower! You can put rocks, grass, or anything else into the vase, and it will stay in his place! Its a great present idea too!



### 4. Manual – snowflakes from paper waste

## By Ralfs Trofimovs

People use a lot of paper for different things and a lot of that paper gets wasted and thrown in the trash. Even though Christmas is already over, the winter still continues, so why not give some scrap paper a second chance and make snowflakes while staying in the winter spirit?

### Necessary items:

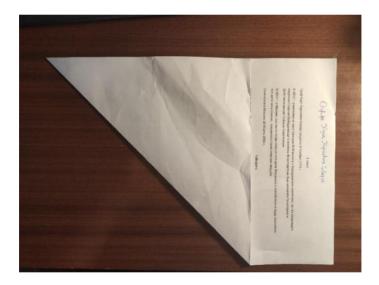
Scrap

paper

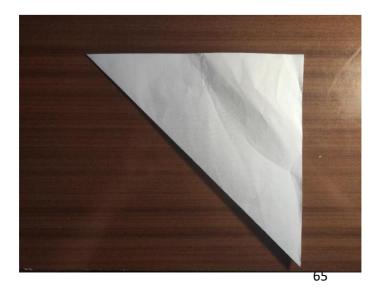
Scissors

### **Instructions:**

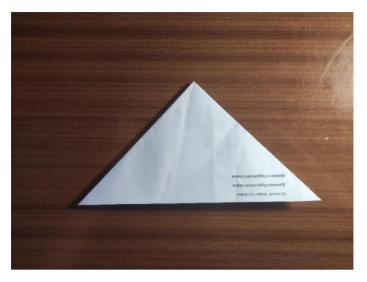
First of all, take a square piece of paper. To create a perfect square from a rectangular piece of paper, fold the paper into a triangle from the corner up to the opposing side and trim off the excess strip of paper, which can be used for little snowflakes.



Diagonally fold the square piece of paper in half. This is not necessary if the paper was cut.



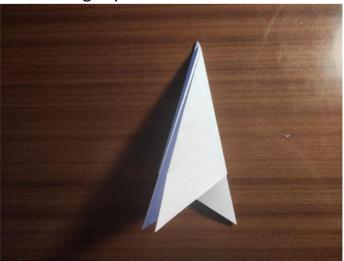
Fold this paper triangle in half so that the pointed corners join.



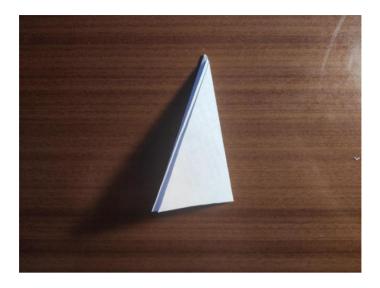
Taking the left pointed corner from this smaller triangle fold a third of the triangle over itself.



Fold the right pointed corner over the triangle making an arrow shape.



Trim off the pointed ends so the paper looks like a triangle again.



Cut the folded paper in an intricate way to make differently ornamented snowflakes.



Gently unfold the snowflake. Don't worry about any imperfections – that's what makes these snowflakes special. To smooth out the snowflake lightly iron it on a low heat.



Make as many snowflakes as needed by repeating the steps. These snowflakes can be used to decorate windows or they can even be hanged from the ceiling.



## Afterword:

The snowflakes are elementary to make, don't cost anything and are a great way to recycle paper. Snowflakes from scrap paper can actually look better than white snowflakes, as anything that was once written on the paper becomes a beautiful pattern. To be even more nature friendly I advise to keep these snowflakes until next winter and not throw them out.

## **5.CUP TRAY**

## By Regnārs Kreičmanis

## You will need:

- Ice cream
- glue

## Step 1:

At first you have to buy a lot of ice cream (I bought 7). Then you have to eat them and leave the sticks.





Step 2: Then you have to wash them and glue them together



Step 3:

Now everything is ready, you can prepare a hot drinkand place the cup on a tray.





CONCLUSIONS

I would recommend making sure you have enough sticks.

# ACKNOWLEDGEMENTS

Grateful acknowledgements to students and teachers from the five partner institutions for their effort in order to put together these ideas to reduce waste and protect environment.







