



### Dear Kids,

Humphrey, a friendly little troll, has moved to our district. As all children, he goes to nursery school, too. Please give him a warm welcome and help him find his way around. Humphrey comes from the faraway country of Trolland, where it doesn't matter if the lights are on all the time, even when the Sun is up. There are running taps everywhere, windows are open all around the year, and the heating is on even in summer. Humphrey loved this so much and he doesn't know that this means wasting energy, which harms trees, plants, polar bears, and even humans. Let's show the tiny little troll that children of the Green Nursery School use water, electricity, and all other energy sources in a smartway, and take better care of our environment.

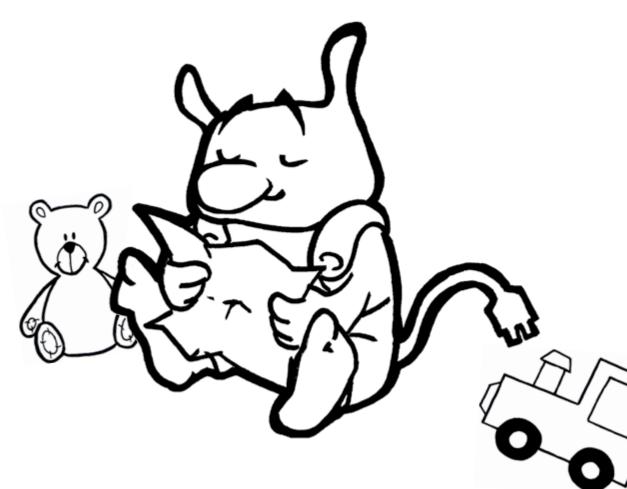
Zoltán Pokorni Mayor

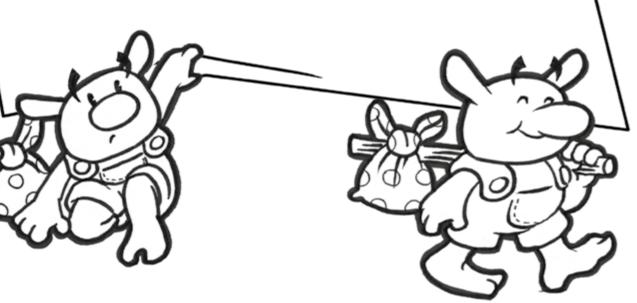


**a see-saw.** Rules don't only apply to putting your toys away or keeping your shoes in a neat row. There are also rules for using energy. But what is energy? Sometimes it is the invisible force driving our world. At other times, it is so easy to see. The Sun has energy, this wind has energy, running water, or, for that matter, running kids have energy. We need energy to keep the nursery school warm and to cool it down. It also gives us light when we work in our colouring books. However, we need some rules to use energy properly.



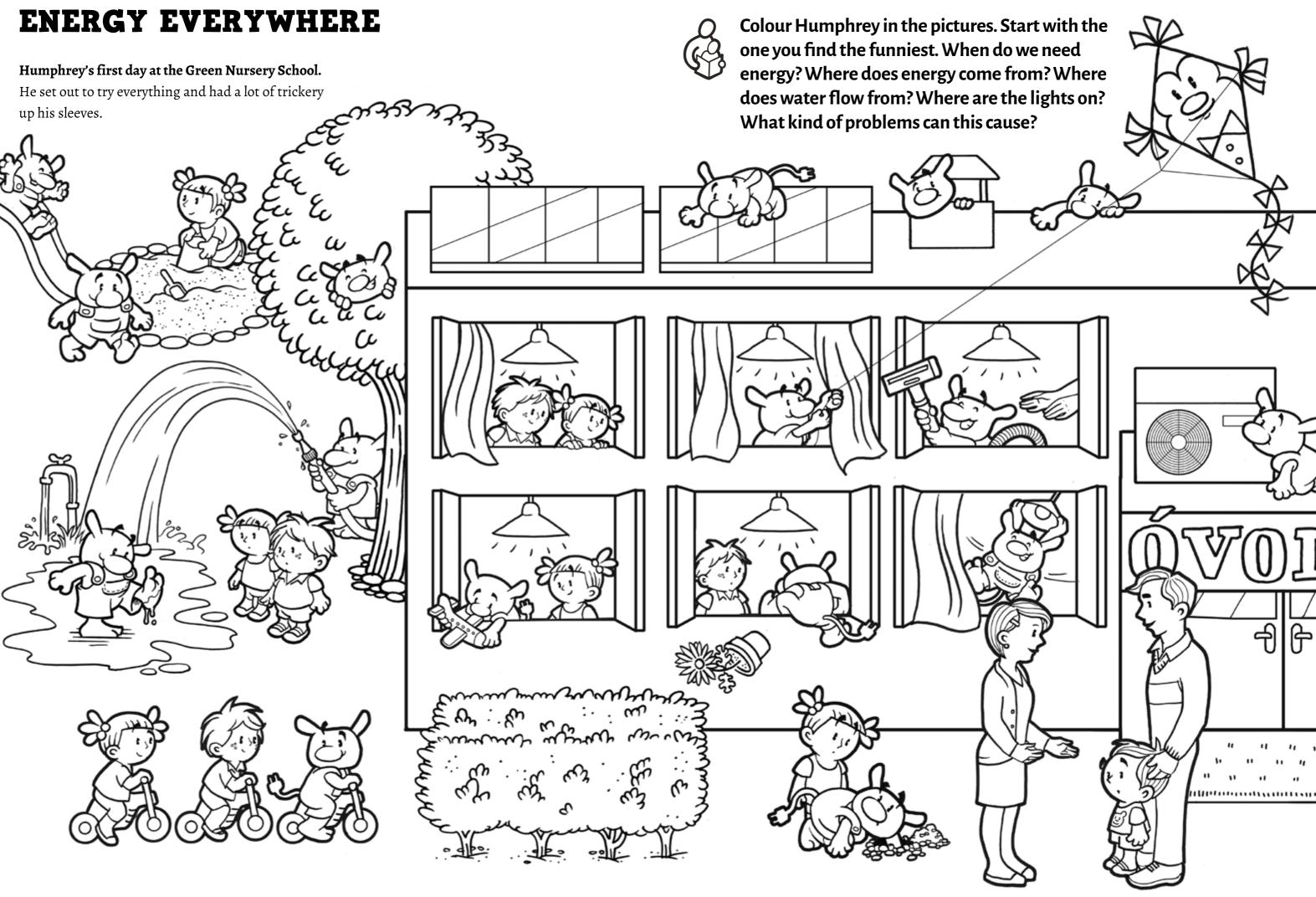
This colouring book will help you understand these rules. If you have any questions, feel free to ask the adults around you. The small picture next to the text means that you can discuss the ideas and add your own thoughts to the booklet. You can find the key to the tasks on the last page.





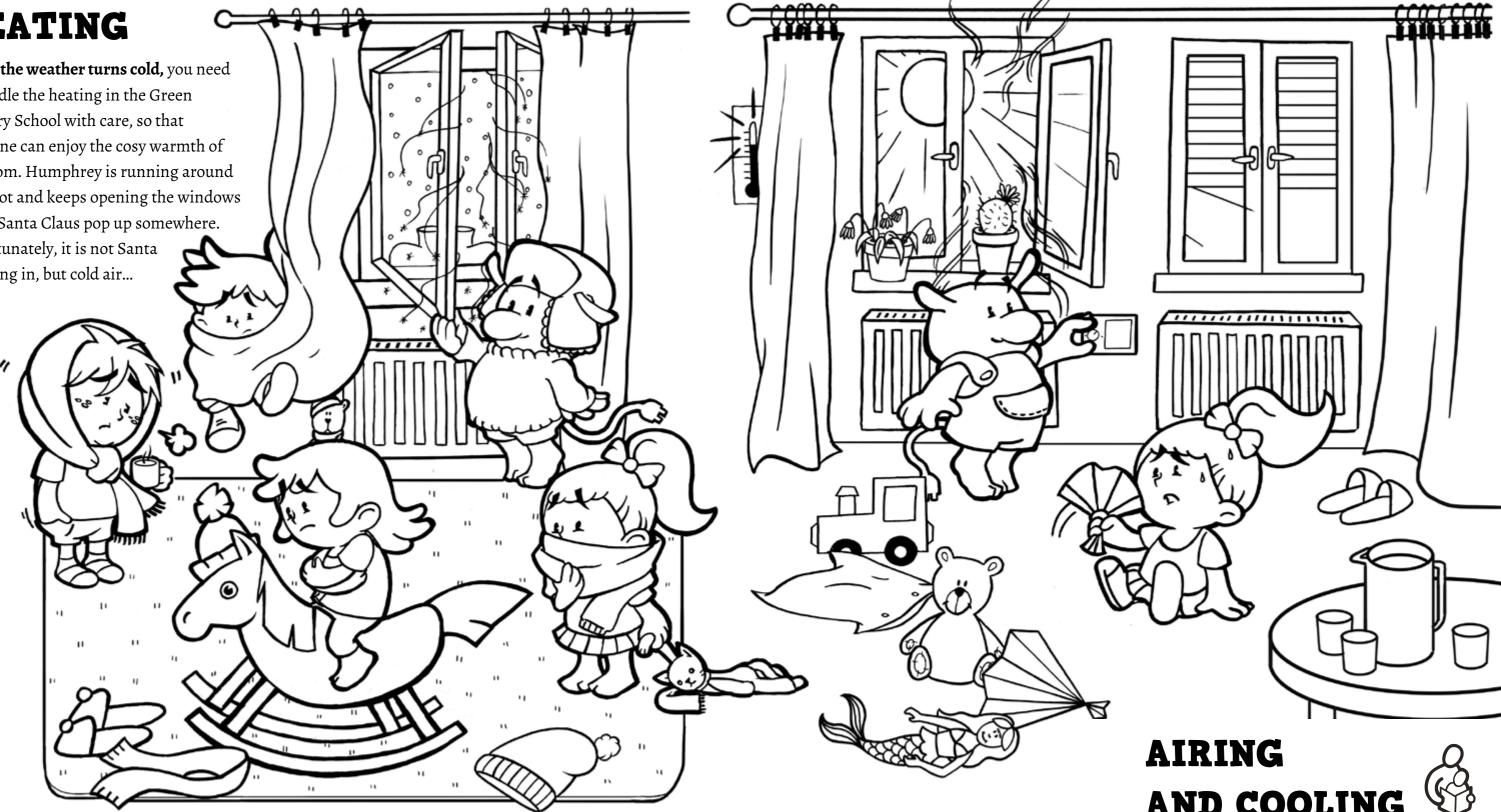
# THE RULES OF THE GREEN

#### The rules of the Green Nursery Sshool are like the fine balance of





When the weather turns cold, you need to handle the heating in the Green Nursery School with care, so that everyone can enjoy the cosy warmth of the room. Humphrey is running around barefoot and keeps opening the windows to see Santa Claus pop up somewhere. Unfortunately, it is not Santa sneaking in, but cold air...



Think about which parts of the room might be cold and colour these areas blue, turquoise, and violet. When are you usually cold? What can you do about it? Find things in the picture that can keep you warm and colour them red, ruby, orange or yellow.

Find the things in the picture Poor Humphrey was looking forward to summer that make you feel cooler when so much, but now he can't handle the heat either. In his daydreams, the Ice Warrior of Airconditionland it's scorching hot. You may add defeats the menacing fire dragon. How do you think some of your own cooling ideas we can help the kids to bear immense heat? if you like.

# **AND COOLING**



#### It's time to make your own draft stopper friend. It's going to be a Draft Dog!

Draft Dog will lie in front of the gaps under doors and windows and will block the cold draft coming in from the outside.

#### You will need:

**1.** A pair of cotton stockings (or pants or knee high socks) **2.** some filling material (rags, cotton pads etc.) **3.** glue or yarn **4**. decoration

**1. Cut down the leg parts** of the stockings with the help of an adult.

- 2. Stuff it with the stuffing materials until it's round enough.
- **3. Close the two ends** by sewing or by tying them up with a string.
- **4. Decorate it** to make it look cute. You can add eyes, ears, a nose, legs or patches.

You can turn the figure into a draftdragon or a draftworm instead of a dog, it's up to you!

## CURTAINS

Curtains are not only used for decoration. Thick curtains don't let cold air leak in through the gaps of the windows. It's not a good idea to cover the radiators with curtains either, as it blocks the heat. It's like throwing a thick blanket on a dragon.

When the sun shines in winter, we should probably draw the curtains open, so that the sunlight can heat the room through the glass panes.

The colour of the curtains matters a lot, too. Shades of red and orange are warm colours and give you the sense of warmth. On the other hand, the colours of ice such as blue, green, turquoise, and violet might make you feel cold.

How long do you think curtains should be? Grab your pencils and decorate them with some warm colours until you reach the line where you would cut them. Did you know that carpets also help you feel warm? Would you like to colour the carpet, too?



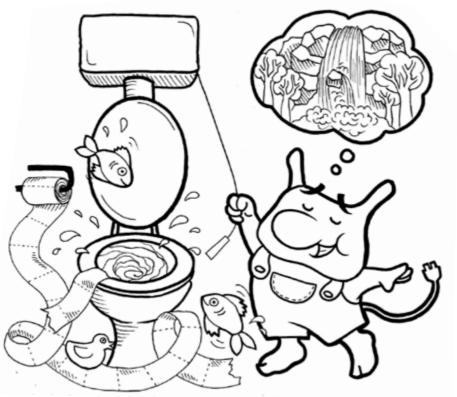


## **USING WATER**

### Flushing

#### There's no question about why we need to flush, is there?

Forgetting to flush gives a lot of headaches to everyone. But it does matter how much water we use for a single flush. Humphrey tugs at the handle and keeps pushing the flush button, changing the toilet into a waterfall. Tell him how he can save water.

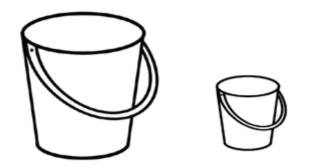


#### Brushing teeth, washing hands

Brushing your teeth is healthy and fun. When Humphrey brushes his teeth, he makes a huge splish-splash with the foam and he also floods the bathroom as he forgets to turn the tap. What do you know about how we should brush our teeth and wash our hands? How can you save water during these activities?

## HOW MUCH WATER DO WE USE ...?

Can you guess which action below consumes more water? Did you know that some water tanks have two buttons? We use the smaller button after doing number one and the bigger one after doing number two. Which button flushes with more water? Match the buckets with the buttons.



Do you usually have a shower? Or do you prefer a long bath in the tub? Which do you think needs more water?

Colour the picture in which Humphrey uses less water!



Why do you think it is important to save water? Can you think of any ways to use soapy water?







ELECTRICITY



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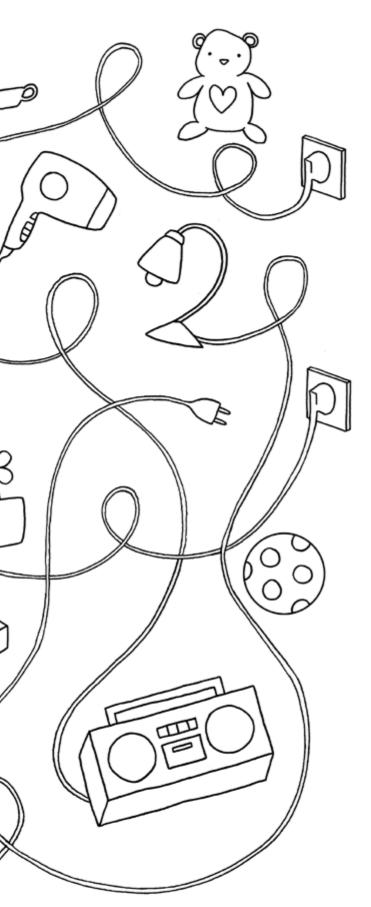
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Humphrey thinks that electricity is magic. It makes our objects alive! But do you always need them to be on? Make sure you switch off the ones you're not using any more and don't forget to switch off the lights either.



Which of the objects in the picture use electricity? Colour them and add some other electric things that come to your mind.



What things does Humphrey need to unplug? Although you shouldn't touch the sockets, you can also remind your parents to unplug electric devices. Which gadgets need no eletricity? Cricle them.

## ... WHAT ABOUT THE FUTURE?

Humphrey has finished his adventurous first year at the Green Nursery School, so now he bids farewell to you. He has certainly learnt a lot from you. Help others like Humphrey learn about saving water and electricity and about the rules of heating and cooling. We can save energy and protect our environment together.





## SOLUTIONS

#### **Energy Everywhere**

There are 16 Humphreys on the picture.

#### Heating

Things that keep you warm (possible answers): scarves, hats, slippers, radiators, sweaters, carpets, hot drinks, etc.

#### Airing and cooling

Some things that help you cool down: fans, plants, wet bandage, keeping ourselves hydrated, shades. **Using Water** 

If the water is running while you brush your teeth, it consumes 8-10 litres of water per minute. Pressing the big button, flushes 9-10 litres of water. (Usually the whole tank empties itself.) The small button flushes 2-3 litres of water. Taking a shower for 5-8 minutes uses 40-50 litres of water, but a bath needs 100-120 l of water to be filled.

#### Electricity

Electric devices (possible answers): fans, lamps, tape recorders, tablets, phones, vacuum cleaners, electric cars, etc.

The hair dryer, the fan, and the music-player are plugged in. Non-electric things: the candle, the flower, the ball, the teddy bear.

## **ABOUT THE PROJECT**

The purpose of this activity book is to familiarize small children with efficient use of buildings. The publication was co-funded by the INTERREG TOGETHER project and the Hungarian government. The project aims at increasing the energy efficiency of public buildings and encouraging the use of renewable energy sources. Complex (technological, financial, and managerial) solutions are being developed and tested, which need no or minimal investment, and try to save energy (and money) by changing attitudes.

The project will result in an innovative energy management approach based on international experience and the involvement and commitment of the operators, users, and tenants of public buildings (i.e. parties having a vested interest in the maintenance of the infrastructure). Seven Central European countries collaborate in the project: Italy, The Czech Republic, Slovenia, Croatia, Poland, Hungary, and Slovakia. Representatives of various sectors, such as municipalities, scientific institutions, and energy authorities cooperate for the success of implementation.

The activity book was created by the collaboration of the Green Office of Budapest 12<sup>th</sup> District Municipality and Budai Art and Design School.

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