





Earth Hour

Education Pack

— ALL —

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About this pack

Hi there, and thanks for celebrating Earth Hour with us and the little people in your lives! This Pack comprises content and resources designed for educators and parents to engage children of different ages in giving an hour for Earth while doing something they love — whatever they're interested in! Comprising six themed sections — creativity, fitness and wellness, sustainability, nature, entertainment, and food — there's something for everyone, and together our actions amount to the **Biggest Hour for Earth**.

While some content and resources have been referenced and suggested throughout the pack, we encourage any parent or educator to localise activities to best suit the child's context.

Sharing is caring: We'd love to celebrate alongside you this Earth Hour — tag us in your social posts with the official #EarthHour hashtags — **#BiggestHourForEarth** and **#MyHourForEarth**.



Sustainability

EDUCATION PACK

Activity

Resources

Learn to be a water management aficionado

Time Age group

1 hour 10+

Water has become the biggest environmental and social challenge of our times. Climate change is affecting freshwater resources. In extreme cases, lakes and rivers in some countries can froth or even catch fire. Recycling water and preventing contamination of existing water resources is a topic every child (and adult) should learn about. This online module will help address serious issues related to air, soil and water pollution because of irresponsible disposal of wastewater. Children will be sensitised to human activities affecting the natural water cycle and will be empowered to take action.

After giving an hour, participants will...

- Learn about the impact of various human activities on the natural water cycle
- Learn about what wastewater is

and why is it harmful

 Learn ways to conserve drinking water sources

What you need

None

- Visit the link on the Resources
 page on Page 6 to access One
 Planet Academy's course on
 responsible water and wastewater
 management.
- 2. Learn more about the various freshwater resources all around you, the impact of various human activities on the natural water cycle, and be empowered to better manage precious water resources.



Sustainability

EDUCATION PACK

Activity

Resources

- Water Essence of Life by One Planet Academy (WWF-India)
- https://tinyurl.com/eh2025watercourse



Sustainability

EDUCATION PACK

Activity

Resources

Mix 'seed dumplings' that promote biodiversity

Time Age group

1 hour All ages

Did you know that wildflowers are a natural magnet for bees and butterflies — also known as pollinators — which are essential to biodiversity on our planet? One way we can help to promote biodiversity and stop nature loss is by spreading 'seed dumplings'... and in doing so, inviting wildflowers and our pollinator friends to make themselves at home in our neighbourhoods!

Give an hour as a family, classroom or community, following a simple recipe for seed dumplings using just a few easy-to-find materials. Then, take a walk to scatter the dumplings in your neighbourhood — feeding local biodiversity — and look forward to watching wildflowers bloom and biodiversity flourishing in the following months and years!

After giving an hour, participants will...

- Develop a first-hand understanding of the concepts of pollinators and biodiversity
- Learn about the role of bees,
 butterflies, and wildflowers in promoting biodiversity

What you need

- · Wildflower seeds
- Paprika
- · Clay soil
- Compost
- · Soil water

- Collect I bucket of clay-rich soil,
 I bucket of compost and half a bucket of water.
- Take some clay-rich soil and some compost, wet them slightly and knead them until they start to bind together.
- Add a sprinkle of seeds and a little paprika (to stop birds from eating them) and roll everything into a ball.
- 4. Leave the seed dumplings to dry for a few days.
- 5. Take a walk around your neighbourhood and scatter your seed dumplings where you would like flowers to grow!
- 6. Be patient when the conditions are right, your seed dumplings will start to sprout! Be sure to keep an eye on where you've 'planted' your seed dumplings, and observe the changes in these areas over time.

Adapted from <u>Seed Bomb Sortie</u> by WWF-UK



Sustainability

EDUCATION PACK

Activity

Resources

- Being There for the Bees by WWF-USA
- http://tinyurl.com/eh2024beingthereforbees
- Five myths about bees
- http://tinyurl.com/eh2024fivemythsaboutbees



Sustainability

EDUCATION PACK

Activity

Resources

1 hour

Discussion

It's story time! Learn to be a nature protector

Time Age group

All ages

Wherever you are in the world, there are bound to be amazing pockets of nature all around you!

However, these pockets are becoming harder and harder to find. From <u>WWF's</u> <u>Living Planet Report</u>, we know that we are currently losing nature faster than we can restore it. But the good news is that we can still come together to protect our planet and make a difference!

Give an hour with your family, friends or classmates to learn about what you can do to help protect the world around you — whether that's through your food choices, water habits, or something else altogether. To get you started on this exciting journey, let's read this picture book all about nature protection, set against the beautiful backdrop of Bhutan.

After giving an hour, participants will...

- Gain basic awareness about key elements of a sustainable lifestyle
- Develop curiosity about the various dimensions of sustainability

What you need

None

- 1. Visit the link on the **Resources** page on Page 12 to download a story, and read it with your family or friends! The story will take you on a journey to Bhutan, where you'll learn how to be a Nature Protector!
- Learn about what you can do, to help protect the world around you – whether that's through your food choices, water habits, or something else all together.



Sustainability

EDUCATION PACK

Activity

Resources

Discussion

- How to be a Nature Protector by Tim Vos (WWF Bhutan)
- https://tinyurl.com/eh-natureprotector



Sustainability

EDUCATION PACK

Activity

Resources

Discussion

Discussion questions

- 1. How do you feel after reading this story? Why?
- 2. Protecting nature can be challenging. What are some things you can do to move past the challenges you might face while trying to protect nature?
- 3. What is one new thing you will do from now on to protect nature?



EDUCATION PACK

Resources

Preparing for a trip in nature

Time Age group

Nil Nil

Did you know: Spending time in nature brings loads of benefits to both your physical and mental wellbeing!
Heading outdoors can be one of the best ways to relax and have fun, whether it's by yourself, or with your friends or family.

Ready for your next adventure in nature? Here's a checklist to make sure you're all set for a relaxing, safe, and invigorating adventure outdoors.

- How to prepare for a trip in nature
- https://tinyurl.com/ehpreparefortrip



EDUCATION PACK

Activity

Resources

Time

1 hour

Discussion

Age group

All ages

Be a nature detective and discover local species!

What to do

Have you ever wondered what flora and fauna you share your neighbourhood with? Let's go on an immersive adventure to find out! In this activity, we'll use our senses to experience and discover the amazing nature around us!

- What you need
- Seek app by iNaturalist (downloadable via the Resources page on Page 16)
- Before you head out, use the internet to try and find out which animals and plants thrive in your region. On your next stroll, go on a mission to discover as many of them as you can!
- 2. Spot a plant or animal that you can't recognise? Download the Seek app by iNaturalist on a phone to discover the little-known biodiversity in your area. Take a picture of a plant or animal using a phone, and use the app to identify and learn about what you've spotted!
- 3. Looking to take it up a notch? Make it a challenge, and see how many plant or animal species you can spot in one hour!



EDUCATION PACK

Activity

Resources

Discussion

- Seek app by iNaturalist
- Available on Google Play and the App Store
- http://tinyurl.com/eh2024inaturalist



EDUCATION PACK

Activity

Resources

Discussion

Discussion questions

- 1. What is one new animal or plant you encountered in your neighbourhood today? What did you learn about it?
- 2. Try making a drawing of your new favourite plant or animal, and do some research on the internet to label its parts!



EDUCATION PACK

Activity

Resources

Play games to discover the wonders of the natural world

Age group

1 hour

All ages

As Maria Montessori said, 'play is the work of a child'. To that we add — play is the best way for children to learn about the natural world around them!

Through stories and play-based activities, children can learn to identify with other living beings, build empathy, develop environmental awareness and more! This playpack is filled with stories and activities designed to inspire children to discover the wonders of nature.

After giving an hour, participants will...

- Identify with other living beings
- Build empathy for wildlife and develop environmental awareness

What you need

Sound map

- Blank sheet of paper (preferably recycled paper)
- Pen

Nose memory

- Small container or bag
- Wet wipes

Colour hunt

 Bag with various coloured papers or small objects

Scavenger hunt

- Sheets of paper
- Boxes or bags for the scavenger hunt
- Felt-tip pens
- Mobile phone (if you decide the children should photograph some of the items)

- Choose two different activities (or more, if you have more time!) across four senses: hearing, touch, smell and sight.
- Head outdoors and spend some time in nature, awakening your senses and turning your surroundings into an amazing playground.
- 3. Try out the remaining activities if you have the time!

Hearing: Sound map

- Human beings are visual creatures. Our eyes are the most important tools to orientate ourselves in our surroundings.
 All other senses come after our sense of sight. This game will open your ears and mind to the world of sounds that we usually don't notice consciously.
- 2. Everybody chooses a spot to sit. Keep several metres distance from each other. Close your eyes and focus on the sounds for a while. What do you hear? Where is the sound coming from? How loud is it?
- If you want to compare the sounds you have registered with others, you can draw a sound map. All you need is a blank A4 paper and

a pen.

- 4. Make a cross in the middle: this is your position. Stay on your spot for 10-15 or more minutes and note all the sounds and noises you can hear on your paper. You may either write ("bird singing") or make a drawing or a symbol for each sound. Can you draw a "real" map where all the sounds you hear are placed in the right direction and distance from you? What do you hear close behind you? What do you hear far in front of you? Just like a visual hiking or a street map you create, make a sound map — it's fun to compare and talk about your findings once you come together again.
- 5. The only rule during sound mapping is this: It is forbidden to talk!

Touch: See with your fingers

- Have you ever explored your surroundings just with your hands?
 Babies do that, but by growing up we rely more and more on our sight. It's fun to "see" the nature around you only with your fingers though!
- First, everybody walks around and looks for things that might be interesting / special / surprising once you have them in your hand or feel them. Concentrate on

- small things that you can remove without harming nature.
- 3. Bring 3 to 5 of the items back and keep them hidden (e.g. in a cotton bag, or wrapped in old newspapers), no one should see them.
- 4. One person closes their eyes and touches one or two "treasures" that the others brought. Can you guess what's in your hands? An interesting variation can be not just to tell what you've touched, but to find and bring the same items. Take turns!
- 5. In the end, the hidden items are uncovered, and it's revealed who did the right guess.

Smell: Nose memory

- Each player, or each team, explores their surroundings and collects 3 to 5 items from nature with a peculiar smell. Concentrate on things that you can remove without harming nature. If you have a small container or bag use it to store the collected items. If not, just collect them and hide them from other players because they should not see them.
- Now, let's check who's got the best nose. One player, or one team, smells one of the collected items and then, just by using their sense

of smell, they have to find them in the surrounding area and bring them back to compare them. Was it a match? Beware of toxic substances and wash your hands afterwards or clean them with wet wipes.

Sight: Colour hunt

- What colour is nature? The majority of children, but also adults, will say green. But is it?
- 2. The colour hunt can be carried out at a specific place or during a walk, especially if you have to return the same way back. Your task is to find a given colour in nature. You can use coloured objects from nature or you can say out loud the colour, but you can also prepare a bag with various coloured papers or small objects, from which everyone draws one colour.
- Start the search. After the search, display the objects and discuss which colour was easy to find and what your favourite colours are. Using questions, direct the children to reach their own conclusions that nature is colourful and that its colours change throughout the year.
- 4. After the activity, you may ask them again what colour nature is.

Four activities above adapted from <u>Explore nature with all your senses</u> by WWF Adria

Sight: Scavenger hunt

- Divide the children into pairs or small groups and give them a sheet of paper, a box or a bag for the search, and a felt-tip pen.
- 2. Before you start, give instructions on what exactly the children should do (e.g. whether they should collect and / or photograph some of the items) and agree on the movement direction and distance from the group. The activity can be performed at a specific place or during a walk (if the walk is linear and you have to return the same way, they can carry out the activity on the way back and thus will not notice they are returning the same way).
- 3. After the search, discuss what they were able to find easily, what the most difficult thing to find was, whether some things could not be found at all at the time of year when the activity was performed or if something does not exist in the habitat they were in.
- 4. Using questions, direct the children to draw their own conclusions (e.g. assign them to find a pinecone but take them to a deciduous forest, or ask them to find a yellow leaf in

spring).

Adapted from <u>Discovering the world</u>
<u>with Meadow Fieldmouse</u> by WWF
Adria



EDUCATION PACK

Activity

Resources

- Explore nature with all your senses by WWF Adria
- https://tinyurl.com/eh-explorenature
- Discovering the world with Meadow Fieldmouse by WWF Adria
- https://tinyurl.com/eh-discovertheworld



Food

EDUCATION PACK

Activity

Resources

Be a sustainable sleuth to reduce your water footprint

1 hour 9-12

Food is vital to our lives and well-being. Currently, <u>70% of water use</u> is for agricultural production. There's a delicate balance to strike in food production and environmental protection.

In this activity, students will create a pictograph to display data on the amounts of water required to produce familiar food items. By learning about the full environmental impact of growing food, students will gain the knowledge they need to make conscious choices that help conserve resources and protect the health of our planet.

After giving an hour, participants will...

- Understand the environmental impact of the food they consume
- Understand how they can make more sustainable food choices

What you need

- Paper
- Pencil
- · Coloured pencils

- Select several foods that are listed in the reference chart in the activity, perhaps those that they enjoy eating or consume regularly. Ensure the reference chart reflects food items consumed locally.
- 2. Use the data in the chart to determine the amount of water required to produce each item.
- 3. Create a pictograph with pencil and paper, showing each food item and its corresponding water usage. Use icons to make it easier to understand (e.g. one drop = 10 liters of water).
- 4. Consider how local food cultures impact water usage. For example, foods like rice, wheat, or certain vegetables might be staples in one region, while meat or dairy might be consumed more heavily in another. How is water usage impacted as a result?
- 5. Discuss how the water requirements for different foods relate to their environmental impact and how they can make sustainable food choices.

Adapted from <u>How Much Water is in</u>
<u>Your Lunch?</u> by WWF USA



Food

EDUCATION PACK

Activity

Resources

- How to Calculate the Water Footprint of any Food by Water Footprint Network
- https://tinyurl.com/eh2025calculatewaterfootprint



Food

EDUCATION PACK

Activity

Resources

Discussion

Get crafty exploring where your food comes from

Age group

1 hour 5-7

What did you eat today, and where did it come from? The way food is produced and consumed in many parts of the world is actually the biggest driver of nature loss, and a major cause of greenhouse gas emissions. Our food systems are fragile, and made even more vulnerable by unsustainable production, consumption, and inefficient distribution.

Spend an hour appreciating and celebrating the food we eat! Start by going behind the scenes with this creative activity to find out where our food comes from, and discover the journeys involved in getting food from its source to our plates.

After giving an hour, participants will...

Develop healthy curiosity
 about food systems and the
 sustainability of food practices as
 consumers

What you need

- Printables provided on the Resources page on Pages 28-29
- Pen

- At the bottom of the paper, draw the various food items that made up your meal(s) today.
- 2. For each food item drawn, draw where you think they might have been sourced from. Perhaps your food is made up of local ingredients, purchased from a supermarket, or sourced from a local farm near you! If you're unsure, try asking your parents or staff at the place where you ate, or do some research online.
- 3. Continue drawing up your food tree until you've reached the origins of your meal!





EDUCATION PACK

Activity

Resources

Discussion

Example food tree FARM IN THE USA FIELDS IN THAILAND LOCAL FARM FARM IN CHINA CABBAUE WHEAT CHICKEN STRAWBERRIES Bread WITH JAM CURRY RICE

Draw your very own food tree here!



Food

EDUCATION PACK

Activity

Resources

Discussion

Discussion questions

- 1. How easy or difficult was it for you to trace the sources of your meal?
- 2. Where did most of your food come from? How do you feel about this finding?
- 3. How do you think the journey your food takes from its source to your plate impacts the planet?
- 4. What do you think you can do to make your food journey more sustainable? What role do you think businesses or governments can play to help?



Food

EDUCATION PACK

Activity

Resources

Discussion

Be a food rescue hero!

Time	Age group
l hour	7-12

Have you ever been in a situation where you couldn't finish your food? What did you do?

Sadly, many people head straight to the rubbish bin. 33% of all food produced gets thrown away — yet food production continues to be the biggest driver of nature loss.

This Earth Hour, why not give an hour learning about the role you can play in rescuing food from being wasted, helping restore the planet in the process? Tap the button below for a game you can play with your friends or family. Through this game, you'll be introduced to different ways you can reduce food waste, and challenged to save as much food as possible from going in the trash!

After this activity, participants will...

 Learn about different ways you can reduce food waste

What you need

 Printables provided on the Resources page on Page 33

- Gather 5-6 of your friends or family members to play together! Each team will need a No Food Waste Game pack. Print out the number of packs you need (preferably on recycled paper), and spend 5-10 minutes cutting out the cards carefully.
- 2. Place garbage cards, recycling / composting cards, and the sachet with snack cards in the middle.
- Each player takes a set of the 2 tompola cards (I treat my friends / I keep it for later) showing options for the snack that was left uneaten.
- 4. Players take turns picking (blindly) one snack card from the sachet.

 This is the snack they have left uneaten. They have to decide what to do with it and place the snack in the correspondent tompola card or discard it in the bins in the middle.
- 5. The player who first fills all the squares of their tompola cards says bingo! They're the winner. Game over!

Adapted from *The No Food Waste Game* by WWF Greece



Food

EDUCATION PACK

Activity

Resources

Discussion

Additional Resources

- Printables for The No Food Waste
 Game by WWF Greece
- https://tinyurl.com/ehnofoodwaste

Discussion questions

- Which parts of this game are similar to your life, and which aren't? How?
- 2. How easy or difficult will it be to make similar decisions in this game and in your life, and why?
- 3. What is one thing you will do to reduce food waste in your daily life?





EDUCATION PACK

Food

Activity

Resources

Help the planet (and your wallet) by growing your veggies

Age group

1 hour

All ages

Growing your own veggies is a great activity for children of all ages! Besides building teamwork and responsibility, few things beat the hands-on fun and thrill of going through the process of seeing a seed turn into a tasty vegetable.

Growing food can lead to lifelong changes in attitudes to eating the fresh stuff we all need to be healthy, and connects children with the natural world — the world that we all depend on.

If you are considering growing food at school for the first time, then this guide is for you! Getting started is easy — just don't be afraid to get your hands dirty.

After this activity, participants will...

 Gain a hands-on understanding of the basic skills and knowledge involved in growing a vegetable

What you need

- Plastic guttering (preferably 'salvaged' or donated rather than new)
- Soil
- Seeds / seedlings
- Drill
- Breezeblocks / large stones
 (alternatively, use plastic bottles you'll need scissors and string for this one!)

- Use plastic guttering as a container to grow a variety of fruits and vegetables. They don't take up much space and can be moved easily if required. Alternatively, reuse disposable plastic containers or water bottles (you can cut them in half with a scissors).
- 2. Source seeds from plants which don't require too much depth, and which thrive in your region. Some examples of crops which don't require much depth include strawberries, spring onions, radishes, bean sprouts and more! Use the internet to find out more, and try sourcing seeds from your neighbours, the supermarket, or even from the fruits or vegetables your family consumes.
- 3. If you are using plastic guttering, take a piece of guttering and drill some holes along the bottom to allow for drainage. If you're using disposable plastic containers, carefully use scissors to create drainage holes. Fill your new 'pot' with compost and water it well before scattering their seeds on top and covering with another thin layer of compost.
- 4. Leave your 'pot' in a bright sunny area and place a breezeblock or large stone on either side to

stop it from being tipped over.
Depending on what you planted,
your seedlings may need to be
thinned out once the seeds have
germinated. Water your plants
regularly, especially if the weather
is warm! A good way to test if a
plant needs to be watered is by
gently touching its soil; dry soil
needs to be watered and healthy
soil should be damp to the touch.

5. Enjoy eating the fruits of your labour!

Adapted from <u>Grow your own</u> by WWK-UK



Food

EDUCATION PACK

Activity

Resources

- Take your journey of growing your own veggies further take your home farming to the next level by boosting your soil and reducing food waste through composting, share your harvest with your neighbours, and do some research to decide what vegetables to grow next!
- Supercharge your soil with kitchen food scraps by WWF INT
- http://tinyurl.com/eh2024kitchenscraps



EDUCATION PACK

Activity

Resources

Let nature power your workout: Freshwater edition!

Age group

1 hour
5-12

Get up and moving while learning about the importance of freshwater species and habitats with this wild workout challenge!

Enjoy exercises tied to fun facts about freshwater species — pick and choose your exercises, and follow up by reflecting on your experience of stretching your wings, fins and paws!

What you need

None

- Check out the various activities part of WWF USA's Work Out Your Wild Side challenge via our Resources page on Page 38.
- Pick and choose five activities
 (alternatively, choose one of
 the provided weeks) to enjoy an
 hour-long of fun! If you're up for it,
 complete all five weeks in full!
- 3. Follow up the challenge by having your students or children complete a journal writing assignment to reflect on their experience.



EDUCATION PACK

Activity

Resources

- Work Out Your Wild Side, Freshwater Week section by WWF USA
- http://tinyurl.com/eh2024workout



EDUCATION PACK

Activity

Resources

Let nature power your next moment of calm

Time Age group

1 hour All ages

Find inner calm outdoors! Unplug and try practising mindfulness or meditation in nature, and experience how nature activates your senses. By taking yourself away from digital distractions, not only may you find it easier to be present in the present, but you may also discover calm and focus, and develop a newfound appreciation for the natural world around you.

What you need

None

- Find a comfortable position sitting or lying down. Begin with a few deep breaths, breathing deep into the belly, to help you relax and to bring you to the sensations of the present moment.
- 2. Now close your eyes and be present to what is being experienced with your eyes closed. Notice how your body feels, as well as the activity of your mind and emotions. Experience whatever is present without resisting anything or trying to change it. Do this for a few minutes.
- Now bring your awareness to everything that you can experience in your surroundings.
 Feel the temperature of the air on your skin, the feeling of the

breeze and the sun. Notice the sounds around you — birds, bees, crickets, flowing water. Listen to the symphony of nature. For the rest of the meditation, continue to experience these feelings and sounds. Whenever your mind wanders, gently bring it back to the experience of nature.

- 4. As you meditate, you can see where your attention is naturally drawn, or purposefully scan for different experiences. You can also focus on one experience and notice the experience in greater detail. If it is a bird's song notice the quality of the sound as if you are going more deeply into the sound. (It may seem to have a shape or texture.) Don't analyse the sound and label it with your mind simply notice the quality of it.
- 5. Once again, whenever you notice that the mind has become absorbed in thoughts, easily bring it back to the sounds and sensations of being in nature. At times both awareness of the sensations from the environment and thoughts will be present. That's fine. Just easily favour the experiences of nature.

Adapted from <u>Nature Meditation</u> by Meditation Oasis



EDUCATION PACK

Activity

Resources

- Additional simple meditation exercises by Mindworks
- http://tinyurl.com/eh2024meditate



EDUCATION PACK

Activity

Resources

All ages

Assemble a nature clean-up crew

Time Age group

Here's a not-so-fun fact about waste: Did you know that a dump truck's worth of plastic enters our oceans every minute?

While plastic can help make our hospitals safer, our food last longer, and our packages more efficient to ship, it has no place in nature. Whether it's plastic or other kinds of waste, trash that's not properly disposed of ends up polluting our air, water and soil — what both people and wildlife need to survive.

While systemic change in waste management is urgently needed in many parts of the world, we can take baby steps towards alleviating pollution in our neighbourhoods. Grab your friends and family to host a clean up in your community — have fun with your loved ones while protecting the wildlife around you!

What you need

- Trash bags
- Gloves

1 hour

- · Trash pickers or tongs
- Wet wipes

- Heading out for a walk? Assemble in small groups, equipping yourselves with trash bags, gloves, and tongs!
- 2. Pick up any trash you see along the way and bin them in your trash bag.
- 3. Remember to protect yourselves from dangerous objects. Never pick up trash with your bare hands. Keep your gloves on, and if possible, use a pair of tongs.
- 4. Feeling competitive? See who can pick up the most trash in an hour!
- 5. Keen on finding out more about the various trash items you've collected? Head over to the **Resources** page on Page 44, and find out how long the trash you find from cigarette butts to disposable diapers takes to decompose.



EDUCATION PACK

Activity

Resources

- Trash Timeline by Leave No Trace
- http://tinyurl.com/eh2024trashtimeline



EDUCATION PACK

Activity

Resources

Discussion

Be water-savvy! Install a rain barrel to save water and money

4 hours 9 and up

Did you know that the average roof collects 600 gallons of water for every inch of rain? In recent years, climate change has led to prolonged droughts and occasional turbulent storms.

Stormwater pollution occurs when rainwater picks up dirt and chemicals from roads and sidewalks, carrying them into rivers.

Rain barrels can help reduce erosion and flooding, helping the planet and providing savings on water bills. Students can work with their parents to install a rain barrel at home to collect rainwater. Students can decorate their barrels to make them visually attractive. Later, students can also explore ways to use the rainwater they collected and see the money savings!

After giving an hour, participants will...

- Be able to explain how rain barrels can reduce stormwater runoff and help the planet
- Learn about various ways to repurpose rainwater

What you need

- A food-grade plastic barrel ranges in size from 30-100 gallons
- Mesh screen or gutter guard
- · Spigot with a hose adapter
- · Drill with hole saw attachment
- Teflon tape
- Silicone caulk or waterproof sealant
- Colouring utensils
- Cinder blocks (optional, for elevation)
- Downspout diverter (optional)
- Hacksaw (if modifying the downspout)

What to do

Prepare the barrel:

- Clean the barrel thoroughly if it previously held any substances.
- Drill a hole near the bottom of the barrel for the spigot. Wrap the spigot threads with Teflon tape, insert it into the hole, and seal it with waterproof sealant. Let it dry.

Create the water inlet:

 Cut a hole in the top of the barrel large enough to capture water from the downspout. Cover the opening with a mesh screen or gutter guard to keep out debris and mosquitoes.

Set up the overflow system:

 Drill a small hole near the top of the barrel for overflow drainage.
 Attach a hose or pipe to direct excess water away from the foundation of your home or garden.

Position the barrel:

 Place the barrel on a level surface or elevate it on cinder blocks for better water pressure. Ensure it's stable.

(Optional) Connect to the downspout:

 If using a downspout diverter, cut the downspout with a hacksaw and attach the diverter to direct water into the barrel. Otherwise, position the barrel directly under the downspout.

Reflect and discuss:

 Observe how rainwater collects in the barrel and discuss how using a rain barrel helps conserve water and support sustainable gardening.

Adapted from the <u>Saving Water and</u> <u>Money with Rain Barrels</u> by WWF USA



EDUCATION PACK

Activity

Resources

Discussion

- Build Your Own Rain Barrel by Green America
- https://tinyurl.com/eh2025rainbarrel
- Soak Up the Rain: Rain Barrels by EPA
- https://tinyurl.com/rainbarrelepal
- Additional ways to soak up the rain by EPA
- https://tinyurl.com/rainbarrelepa2



EDUCATION PACK

Activity

Resources

Discussion

Discussion questions

- 1. What surprised you about the sources of stormwater pollution and its impact on your local waters?
- 2. Can you name some ways to repurpose rainwater?
- 3. How can we help ensure the rainwater collected is not contaminated by pollutants?



EDUCATION PACK

Activity

Discussion

Save water, save the planet!

Time Age group

1 hour

7 and up

Of all the water on Earth, just 2.5% is fresh water — and most of that is locked up in ice or deep underground.

Does it rain much where you are?
Rainwater is a free yet precious
freshwater source with a multitude
of potential uses, and by harnessing
its potential we can take steps to
safeguard the future of people and
our planet.

Give an hour setting up simple systems around your home or school to recycle rainwater and greywater, and reduce the energy and resources used to process the water that flows from our taps. Recycle this water you've collected to flush toilets, water plants, and more — and you'll be well on your way to helping save the planet!

After giving an hour, participants will...

 Understand basic ways to repurpose rainwater, greywater and reduce your water use

What you need

- · Recycled plastic bottles
- · Waterproof markers

What to do

- Find 4 sources of greywater around your household. This is wastewater from any household source apart from your toilets!
- 2. Greywater can be collected as you:
 - Shower
 - Wash your fruits and vegetables
 - Do your laundry
 - Wash your dishes
- 3. Feeling creative? Decorate the plastic bottles you're about to use.
- 4. Upcycle the plastic bottles by using them to collect greywater around your house.
- 5. Recycle the water by using it to flush your toilets or water your plants! Be sure never to fill the flush storage tank with greywater as it will start smelling and may clog the flushing mechanism.

Adapted from <u>Recycling greywater for</u> <u>gardening</u> by WWF INT



EDUCATION PACK

Activity

Discussion

Discussion questions

1. How much water could you collect in your first week after setting up this system? How do you think you can increase the amount of water you save?



EDUCATION PACK

Activity

Resources

Discussion

Get creative discovering the 'bee'-autiful world of bees

Age group

1 hour

All ages

What comes to mind when you think of bees? With many species of bees vulnerable and endangered, bees don't just help to produce honey—they are actually crucial for sustaining our ecosystems and the crops we depend on for food!

Discover the 'bee'-autiful world of bees through fun crafting activities. Soon enough, you'll know all about the different kinds of bees around the world, why and how they matter, and how we can protect them!

After this activity, participants will...

 Learn about the varieties of bees in the world, and their important role as pollinators in promoting biodiversity and more!

What you need

For the Drawing activity

 Printables provided on the Resources page on Page 54

For the Bee hotel

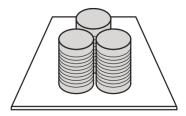
- Three clean tin cans
- Bamboo canes
- Non-toxic PVA glue
- · Wood glue
- Paint
- Two thin pieces of wood for the roof
- A thin square piece of wood for the back of the hotel

What to do

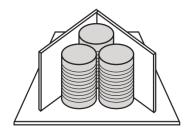
- Learn more about bees through the BEES — MORE THAN HONEY guidebook found in the accompanying Resources page!
- Try your hand at drawing and colouring bees and other various insects with our accompanying printables.
- 3. Looking to challenge yourself?
 Build a bee hotel for your fellow
 neighbourhood bees!

Building a bee hotel

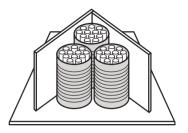
 Place the piece of wood you have chosen for the back of your bee hotel on the floor. Put wood glue on the bottom of the cans and stick them to the wood in a pyramid shape (two below one on top). Leave them to dry for an hour.



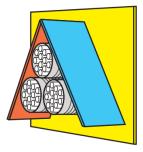
 Take the pieces of wood for your roof and place them in a triangle shape covering the cans and glue them into place. Leave them to dry for an hour.



 Cut the bamboo canes into short sections the depth of the tin cans.
 Place a little PVC glue on the end of each cane and push it into the can. Fill up the can with the canes.



Now your bee hotel is nearly ready.
 Paint it in bright colours (with non-toxic paint) and leave it in a quiet place outside for the bees to start using.



Adapted from <u>Make a bee hotel</u> by WWF-UK



EDUCATION PACK

Activity

Resources

Discussion

- BEES MORE THAN HONEY by WWF Adria
- https://tinyurl.com/eh-morethanhoney



EDUCATION PACK

Activity

Resources

Discussion

Discussion questions

- 1. How did you feel about bees before and after this activity?
- 2. What is your favourite new fact that you learned about bees today?
- 3. How can you share what you learned about bees today with someone else?



EDUCATION PACK

Activity

Resources

Discussion

Immerse yourself in a comic book about plastic pollution

Time Age group

1 hour 7 and up

Did you know? 1 in 2 marine turtles have eaten plastic, and 8 million tonnes of plastic are dumped into our oceans every year. Over the last 10 years, plastic pollution has become one of the biggest environmental challenges, putting biodiversity, natural habitats, and the lives of countless species — including us — at risk. How did we end up here?

Spend the hour learning about the problem of plastic pollution with your friends or family — through this comic, we'll transport you to Vietnam, where you'll be immersed in an engaging story about how and why plastic pollution occurs, and what we can do about it!

After giving an hour, participants will...

 Gain a basic understanding of some of the causes and impacts of plastic pollution

What you need

 Printables provided on the Resources page on Page 59

- Tap the link on the Resources
 page on Page 58 and dive into
 a mystery-filled adventure in
 Vietnam, where you'll learn about
 plastic pollution and how it affects
 the world around you.
- 2. Feeling inspired by our heroes?
 Print the printables provided on
 the **Resources** page on Page 59
 and draw a short comic on how
 you can keep your neighbourhood
 green and free from plastic! You
 too, can be a green champion!



EDUCATION PACK

Activity

Resources

Discussion

- Mystery on Big Island by WWF Vietnam
- https://tinyurl.com/eh-mystery

Draw a comic on how <i>you</i> keep your neighbour green and free from plastic!		



EDUCATION PACK

Activity

Resources

Discussion

Discussion questions

- 1. What do you think are some of the biggest causes of plastic pollution?
- 2. What role can you play to reduce or address the problem of plastic pollution in your community?
- 3. What changes do you think are needed on a wider level to address this problem?



EDUCATION PACK

Activity

Resources

It's game time! Test your knowledge about freshwater habitats

Age group

1 hour 8-12

Just how much do you know about the species that call freshwater habitats home? Put your knowledge to the test, and have a blast while you're at it!

Host quiz night for your family or classmates — harness your competitive spirit and channel it towards learning about the importance of freshwater to our planet! Make your own quizzes on paper, Powerpoint or Kahoot — ranging from topics like fascinating facts about different freshwater species, threats to freshwater, and more!

What you need

None

- Check out the Kahoot quizzes provided under our accompanying Resources page on Page 62.
- 2. Choose 3-5 different quizzes for your group to test their knowledge on!



EDUCATION PACK

Activity

Resources

- Freshwater Kahoot quizzes by WWF USA
- https://tinyurl.com/eh2025freshwaterkahoot



EDUCATION PACK

Activity

Resources

Watch an educational video or documentary about nature

Time Age group

1 hour 2-6 and up

Who says entertainment can't be meaningful? Make the most of your screen time by diving deep into a nature or sustainability-related topic of your choosing — host a screening at home, school, or seize the opportunity for alone time. With all the great options out there — from educational cartoons to deep documentaries — the toughest part might be choosing what to watch!

What you need

None

- Check out some of the videos provided in our **Resources** page on Page 64 and learn more about sustainability and the wildlife around you.
- 2. You are encouraged to use these videos to introduce children to the various actions they can take to care for the planet, and facilitate discussions and explanations about the what, how, and why of the actions they can take.



EDUCATION PACK

Activity

Resources

- Pocoyo's Earth Hour playlist
- https://www.earthhour.org/pocoyo
- http://tinyurl.com/eh2024pocoyoplaylist
- Earth Hour 2024: Child-Friendly Education Videos from our Network
- http://tinyurl.com/eh2024eduplaylist

Sharing is caring! We'd love to celebrate your children's creativity as they learn to care for the planet! Tag us in your social posts with the official #EarthHour hashtags — #BiggestHourForEarth and #MyHourForEarth.