WHAT TO DO WITH RUBBISH IN PEMBROKESHIRE COAST NATIONAL PARK?

SUPPORT MATERIALS

If you need further support on specific aspects of outdoor learning these materials can enhance the engaging experiences you are providing. They can support you as you design, plan and implement your curriculum. Outdoor learning is a great way to develop learners' integral skills (creativity and innovation, critical thinking and problem-solving, personal effectiveness, planning and organising). You will want to focus on why learning matters and ensure you are meeting your learners' needs.
These materials show a path that could be taken through the activity. This is not meant to be prescriptive. You should adapt your approach depending on your learners' needs and interests and your local area.

OVERVIEW

Learners look at where litter might be found in Pembrokeshire Coast National Park, how it got there and where it came from. They explore lots of ideas about making artworks out of rubbish so that they can design and make their own. They investigate how we can reduce our 'waste' by using the 5Rs. This includes setting up and running a school swap-shop and a repair café. They then look at recycling in greater detail, particularly focusing on data from Pembrokeshire and Wales.

CURRICULUM FOR WALES

Areas explored:

- Expressive Arts
- Health and Well-being
- Humanities
- Languages, Literacy and Communication
- Mathematics and Numeracy

Activity also incorporates aspects of cross-curricular skills outlined in the LNF and DCF.

RESOURCES

Internet enabled device and internet access.
Access to Find out what every symbol means on an OS Explorer map - OS GetOutside.
Means of safely collecting litter in local areas, e.g. litter pickers, bags, gloves, etc.
Somewhere to store the litter collected.
Means of making artwork out of litter collected, e.g. glue, string, tape, wood, etc.
taking photographs, e.g. smart phones, tablets, digital cameras.
Venue in school to hold a swap-shop.
Venue and facilities in school to hold a repair café.

DOING THE ACTIVITY

- Most tasks require learners to work in pairs or groups.
- Encourage learners to share their ideas, and through open questioning, explain and justify their ideas when possible. Focus questions have been suggested to guide learners through the tasks.
- To access the scale in Google maps, click on 'View larger map'.
- When taking learners outdoors, it is essential that the Countryside Code is adhered to and any relevant risk assessments have been carried out with risks mitigated.

TASK 1

WHERE DO WE FIND RUBBISH?

Explain to learners that they will look at where litter might be found in Pembrokeshire Coast National Park, how it got there and where it came from.

Screen 3

Invite learners to look at the map showing the Pembrokeshire Coast National Park and answer the questions posed.

Focus questions

- Where do you think would be the most likely place to find rubbish? Why here?
- What sort of rubbish might you find? Why?

- Who might be responsible for leaving this rubbish? Why do you think that?
- What could be done to reduce the chances of people leaving rubbish? Why would this work?

Screen 4

Ask learners to follow the link to read about the issue of litter within the Pembrokeshire Coast National Park: Managing Resources - Pembrokeshire Coast National Park. Then, ask them to answer the questions posed.

Focus questions

- What are the main litter issues affecting the Pembrokeshire Coast National Park?
- What strategies are being used to tackle these problems?
- How successful are these strategies? Why do you think that?
- What else do you think the Park could do to solve these problems? Why would these things work?

Screen 5

This screen has a photograph of a buoy found on a beach within the Pembrokeshire Coast National Park. Research shows that the buoy started its journey just off the coast of Canada. We refer to this as 'provenance' – the place of origin or earliest known history of something.

Screen 6

Invite learners to look at the map and discuss the questions posed.

Focus questions

- How long do you think it took the buoy to complete this journey? Why do you think that?
- How far did it travel? How do you know?
- What material do you think it is made from? Why?
- How do you think the provenance was traced? Why do you think that?

You will need to 'View larger map' to see the map scale.

Screen 7

Explain to learners that they will go outside to collect different types of litter. Then, ask them to discuss the questions posed in small groups.

Focus questions

- How will you ensure your safety when collecting litter?
- What rules do you need to follow? Why?
- What will you store the litter in? Why?

Screen 8

Take learners outside to safely collect litter.

Screen 9

Invite learners to investigate the litter they have collected. Explain to them that they probably have a range of packaging made from different materials that have been used for different products. Ask learners, still in small groups, to discuss the questions posed.

Focus questions

- Who might have left this litter? Why do you think that?
- Why might they have left this litter?
- What was originally inside the packages you found? How do you know?

Screen 10

Ask learners to consider the provenance of the litter, by discussing the questions posed.

Focus questions

What can you find out about:

- where it was made
- where it was bought
- what product it contained
- how it might have ended up where you collected it from?

Screen 11

Invite learners to look at the map and trace the journey of one of their packages from where it was made to where it ended up. Then, to discuss the questions posed.

Focus questions

- How could this package have avoided ending up as litter?
- How could the packaging have been different? Why would this help?
- How could some of the journey have been avoided? How do you know?
- Why was it left as litter? Why do you think that?

You will need to ‘View larger map’ to see the map scale.

TASK 2

BEAUTIFUL RUBBISH?

Explain to learners that this task will give them lots of ideas about making artworks out of rubbish so that they can design and make their own.

Screen 3

This screen has an image of an artistic use of litter. Ask learners to discuss the questions posed.

Focus questions

- What do think is shown in the photograph? Why do you think that?
- Would you say this is artwork? Why?
- What message does this give? Why do you think that?
- Who might it be aimed at? How do you know?

Screen 4

Further photographs are shown of possible uses of litter. Ask learners to discuss the questions posed.

Focus questions

- What materials are being used? Why do you think that?
- What do you think can be made from recycled materials? Why?
- How have you used recycled materials?

Screen 5

Explain to learners that many artists use rubbish or materials that can be recycled to create artwork. Ask learners to discuss the questions posed.

Focus questions

- What materials are being used? Why do you think that?
- What title would you give these pieces of artwork? Why?

Screen 6

The photograph on this screen is of a dolphin filled with litter from a Pembrokeshire beach. Ask learners to discuss the questions posed.

Focus questions

- What do think is shown in the photograph? Why do you think that?
- Would you say this is artwork? Why?
- What message does this give? Why do you think that?
- Who might it be aimed at? How do you know?

Screens 7-8

Invite pairs of learners to find out about local artists who make use of rubbish or recycled materials in their work. Ask them to use the QuADS grid on screen 8 to help structure their research.

Screen 9

Remind learners they have gathered litter from the National Park. Ask learners, in small groups, to discuss the questions posed.

Focus questions

- How could you use some of the litter to create artwork? What initial ideas do you have?
- How could you create a collage or a sculpture? Why do you think that?
- What piece of art will you create? Why?
- What message do you want the art to convey? Why?
- How will you achieve this? Why will this achieve what you want?
- What will you call your artwork? Why?

Screen 10

Ask learners to create their piece of artwork and display it in school.

TASK 3

WHAT ARE THE 5RS?

Explain to learners that now they will look at how we can reduce our 'waste' by using the 5Rs.

Screen 3

Explain to learners that every year on Earth we...

- use billions of tons of natural resources
- dig up raw materials
- make things that are barely used and then throw them away as 'waste'.

Ask learners to discuss the questions posed.

Focus questions

- How sustainable is this approach? Why do you think that?
- What if we stop using the word 'waste'? What effect might this have? Why?
- What is the real problem here? Why do you think that?

Screen 4

Explain to learners that the 5Rs are a set of principles that help people make better choices for the environment to move us closer to 'zero waste'.

They 5Rs are:

- Refuse: Bring less into your home.
- Reduce: Use less.
- Reuse: Use things again.
- Repurpose: Use things for a different purpose.
- Recycle: Turn waste into new materials or objects.

Screen 5

Ask learners to look at the suggestions for making better choices for the environment, and to click on the boxes to show their ideas.

Focus question

- Which of the 5Rs are in play when you do each of these things?

There are no right or wrong answers but each one can be discussed as a class in turn as to the most probable answers.

Screen 6

Ask learners to look again at the suggestions for making better choices for the environment and to discuss the questions posed.

Focus questions

- How could each of these ideas help reduce our use of materials and resources? Why do you think that?
- Which ideas do you think would have the greatest impact? Why?
- What else could you do to help reduce our use of materials and resources? Why would these things help?

Screen 7

Explain to learners that the first three of the 5Rs – Refuse, Reduce, Reuse – are things we can implement in our everyday lives. Ask learners to discuss the questions posed about how better choices could be made at home.

Focus questions

- What could we refuse to buy?
- Which things could we use less?
- Which things could we reuse?

Then, to write a Tweet/X to help others think about what they could refuse, reduce and reuse in their everyday lives. Remind them, they only have 280 characters.

Screen 8

This screen has an image of upcycled jars. Ask learners to discuss the questions posed.

Focus questions

- How have these things been upcycled? Why do you think that?
- What were they before? How do you know?

Screen 9

This screen has an image of an old chair. Ask learners to discuss the questions posed.

Focus questions

- How could you upcycle this chair?
- Why would you want to upcycle the chair?
- Why might somebody buy the upcycled chair? What makes you think that?

Screen 10

Invite learners to find out what items the school and their family are thinking about getting rid of and to discuss the questions posed.

Focus questions

- Who decided to get rid of these items? Why?
- Why are they being thrown away?
- What will happen to these items? Why?
- How could you upcycle them?
- If you couldn't upcycle them, what else could you do with the item? List your ideas.

Then, to select one of the items being thrown away and write a plan for upcycling it. Learners could search online for upcycled items to get some ideas as to possibilities.

Screen 11

Explain to learners that they are going to invite children and adults to bring into school items they no longer want and would be prepared to swap. Ask them to discuss the questions posed.

Focus questions

- Where in school would you set this up? Why?
- How would you organise it? Why?
- What would you need to think about? Why do you think that?
- What could be the possible issues? How do you know?
- What could you do to tackle these issues?

Then, to set up a school 'swap-shop'.

Screen 12

Following the swap-shop, ask learners to reflect by discussing the questions posed.

Focus questions

- What worked well with your swap-shop?
- What didn't work well with your swap-shop? Why?
- If you set up another swap-shop what would you do to make it more successful than the first one?

Screen 13

Explain to learners that one of the simplest ways to reuse an item is to donate it to a friend or relative or to an organisation such as a charity.

Invite learners to click on the link to find out more about the Reuse Network: Donate items - Reuse Network. Ask them to enter their postcode or town to find the nearest reuse centre to where they live.

Explain to them that other charities also accept donations of items. Invite learners to carry out an internet search to find other local charities that would accept items.

Ask each pair to prepare a one-minute presentation to share their findings with the rest of the class.

Screen 14

Invite each pair to present what they have found out about donating unwanted items to local charities.

Screen 15

Explain to learners that repair cafés are becoming more popular. Ask them to discuss the questions posed.

Focus questions

- What do you think a repair café is? Why do you think that?
- What might they repair? How do you know?

Inform them that in its simplest form, a repair café is a pop-up event where the local community can get their broken household items repaired. Volunteers repair things such as clothes, toys, furniture, bikes and simple electrical devices for free.

Screen 16

Invite learners to click on the link to find out more about repair cafés in Wales: Repair Cafe Wales - Local Community Repair Cafés.

Then, to click on the 'Start a Repair Café' tab and look at the preferred model for starting a repair café. Ask them to discuss the questions posed.

Focus questions

- How would you find a free venue? What steps would you take? Why?
- How would you use social media to find volunteers and visitors? Why do you think that?
- What would your poster to advertise a repair café event look like? Why?
- Who could you contact or speak to about insurance and health and safety issues? How do you know that?
- What sort of risk assessment would be needed for an event such as this? Why do you think that?
- Who could you talk to about risk assessments? How do you know?
- What do you think PAT testing is? Why?

Screen 17

Explain to learners that they are going to organise a repair café in school. They will need to find expertise amongst teachers, families, e.g. people who can sew to mend clothes, mechanics to mend bicycles or toys, etc.

As a class, invite them to plan how they will...

- Invite expert volunteers.
- Ensure expert volunteers have the relevant tools to repair items.
- Take account of any insurance and health and safety issues.
- Make a thorough risk assessment.
- Invite people to the repair café with items that they would like mended.
- Put on refreshments.

Screen 18

Ask learners to select a date and time and where they will hold the repair café. Then, in small groups, produce a social media post to advertise their repair café.

Screen 19

Run the repair café.

Screen 20

To reflect on their repair café, ask learners to discuss the questions posed.

Focus questions

- What worked well with your repair café?
- What didn't work well with your repair café? Why?
- If you set up another repair café what would you do to make it more successful than the first one?

TASK 4

WHAT IS THE 5TH R?

Explain to learners that we have touched on recycling earlier but now we will look at recycling in greater detail.

Screen 3

Ask learners to discuss the questions posed.

Focus questions

- When have you heard the word 'recycling' used?
- What different meanings might it have? How do you know?
- What different types of recycling are there? Why do you think that?
- What materials are recycled? How do you know?

Screen 4

Show the video produced about 4 years ago in Pembrokeshire: The Wonder Of You - Pembrokeshire Recycles (about 4 minutes). Ask learners to discuss the questions posed.

Focus questions

- Why do you think the video was released?
- What information does it give to the viewer?
- How useful do you think the video was at the time? Why?

Screen 5

Explain to learners that we are now going to investigate how good Pembrokeshire is at recycling. Invite learners to review the data about recycling rates and other waste data for each of the local authorities in Wales. Then, to discuss the questions posed.

Focus questions

- How well does Pembrokeshire compare with the other 21 local authorities in Wales? Why do you think that? What evidence is there to support your ideas?
- Why do you think there is a difference between authorities? Who is responsible? Why do you think that?
- Explore the data about disposing waste in general. How does Pembrokeshire compare with other local authorities? What could be done to improve Pembrokeshire's waste disposal? Why would these things work?

Screen 6

Inform learners that according to the Welsh Government:

"Since Wales has had its own government in 1999, we have become a global leader in recycling. We're now first in the UK, second in Europe and third in the world for household waste recycling. Put simply, recycling is what we do!"

Invite learners to follow the link to explore how this has been achieved: How Wales became a world leader in recycling. Then, to discuss the questions posed.

Focus questions

- Which of the strategies do you think was the most important? Why do you think that?
- What evidence is there to support the claims being made about recycling? How could you check these things?

Screen 7

Ask learners to follow the link and review the facts and trivia about recycling in Wales: Recycling facts and trivia.

Explain to them that they are going to create a digital infographic to show some of the information in a different way. Ask learners to discuss the questions posed.

Focus questions

- What makes a good infographic? Why do you think that?
- What information do you need to include? Why?
- What is the best way to present this information? Why do you think that?

Then, to create their infographic.

You could access Best infographic tools for information on free online infographic tools.