Change the story.

Creating new climate stories across Europe

Part 3. Visioning and planning for the future

Mississippi Flooding: Storyboard

Level

Let's Pull the Level

James Scott steals very important sand bags from the level.

GLOBAL WARMING is an impact!!!

A cold et stream moves South through May, June and July

72,000 homes have flooded.

Increase the numbers in trained locations.

Bye Bye hopes and dreams... Relocate farm lands... encourage then.
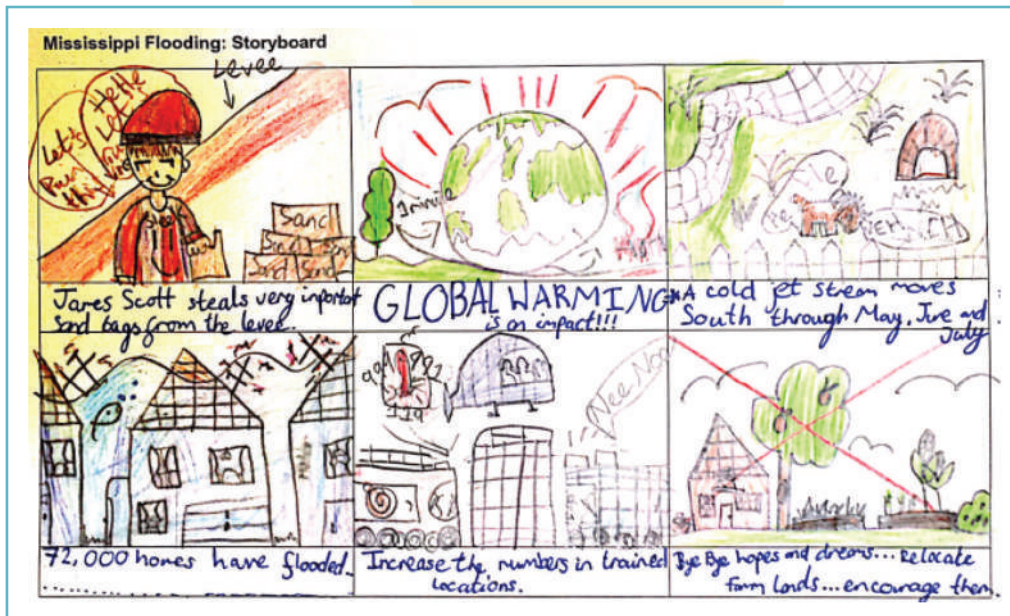
"Very fun learning about the future…we made sculptures about what lives in a town and how it can be suitable for climate change" – Year 4/5 pupil.

'Change the Story' follows a framework where pupils explore past-to-present changes, then look at present-day change-makers, building up to the point where they create their own change stories for the future. Part 3 is about imagining and creating those change stories.

The future will be very different from today, and we must consciously choose it. Faced with the climate crisis, humanity's survival will require the ability to imagine and do things differently to bring about change.

Maslow (1972) states that "we grow forward when the delights of growth and anxieties of safety are greater than the anxieties of growth and delights of safety." Another way of expressing this is as a 'change formula': change can happen when the cost of change is equal or less than preserving the status quo.

Change = dissatisfaction with the present x vision for the future x first steps.

All this requires a positive vision for future change. Dissatisfaction with the present is insufficient on its own.

This part begins with some ideas for how pupils can think about the future.

The final outputs are digital stories (**https://stories.changethestory.eu/uk/**) created by pupils. These can be very engaging and pupils enjoy spending time creating them. **Ensure you leave sufficient time for this very creative final step.** Some previous examples can be found on the website to inspire your pupils.

The sequence of activities

The following sequence of activities supports pupils in creating and communicating ideas about future change. It follows seven steps for creating digital stories.

Step 1. Create a vision.

Step 2. Think about your audience.

Step 3. Write your story.

Step 4. Create a storyboard.

Step 5. Research and gather elements.

Step 6. Build your story.

Step 7.   Reflect on your story.

This is a different structure from the one used for parts 1 and 2.

What is digital storytelling?

Digital storytelling is a way of telling stories using technology that brings together one or multiple different digital elements (video, audio, or various forms of written or visual content) to make a compelling narrative.

The seven-step process that we offer is not the only way of thinking about digital story making. For example, the project's Turkish partners shared with us the following '8 steps for digital storytelling', based on the work of Samantha Morra, and with a greater emphasis on images and music.

See Samantha Morra's website for further details:

https://samanthamorra. com/2013/06/05/edudemic-article-on-digital-storytelling/
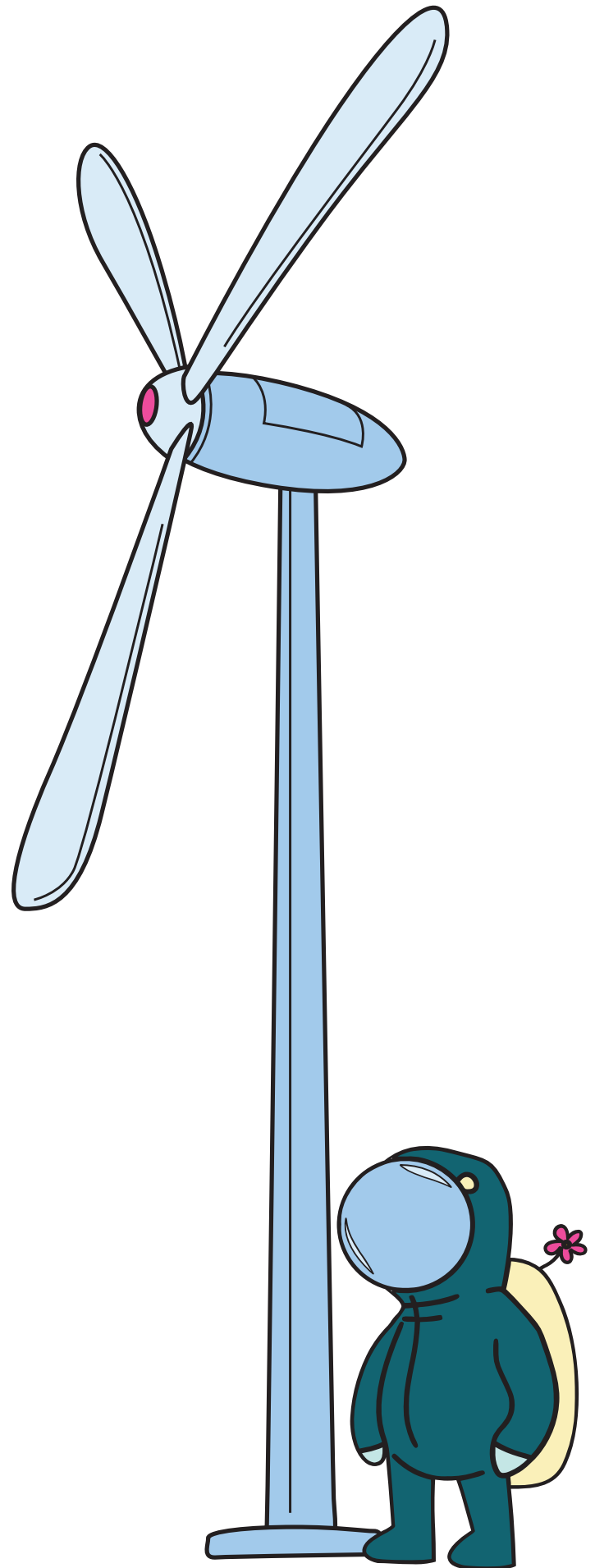
Step 1. Create a vision

The first step is to think about the sort of future you want and create a vision for this. This section (Initiating) is about exploring the kind of future pupils want in their community and looking for areas of pupil interest. Visions and ideas about the future can take time to evolve. It is useful as pupils progress through the other steps that they revisit their visions and add to them.

We offer two approaches which have proven popular with pilot schools, and suggestions for three other approaches.

Futures Cards

It can be challenging for pupils, especially younger ones, to envision the future. Pupils often repeat the 'accepted wisdom' of what they have been told by others. This is perfectly reasonable, however, we also want to introduce pupils to new ways of thinking and acting without being prescriptive. To help, we have produced a set of 'Futures Cards' (see Annex 1). Each represents one innovative idea which is currently being implemented together with an image and short description. They are designed to spark pupils' imagination. See example below.

Change the Story.

Transport and Mobility

Car Free Towns

Imagine if... towns and city centres were car free. In the UK, one-third of carbon emissions come from transport, with private cars contributing the most. What could we do with all the extra space?

This is already happening in many cities across Europe.

All Cars Electric

Imagine if... all cars were powered by electricity rather than petrol. There are already 260,000 electric cars in the UK, as well as 535,000 hybrid cars (electric & petrol).

Several car makers have committed to stop making petrol cars before 2030.

Future Cards – examples of transport and mobility solutions.

The Futures Cards can be used to stretch pupil knowledge from something they already know to something new based on their initial idea. For example, many pupils will suggest using cars less and cycling more. You could ask if these ideas are enough, and present ideas from the Futures Cards which relate to transport asking, "Have you thought about…? Is personal change enough?"

"It is hard for them to think about the Future: their ideas were very much 'let's get bikes' and stuff like that. We were saying 'anything could happen in the future, trying to make it more interesting, helping get the ideas a bit more abstract" – *Year 6 teacher.*

Pupils could relate each idea, including their own, to the level of impact or use the circles of change worksheet (see Annex 2). The Future Cards also relate to the iceberg model introduced in the teacher support resources; again, this model could be used to encourage pupils to think more deeply. Pupils might suggest using more renewable energy; you might also suggest:

- They explore how wind power can be promoted.
- They investigate if energy efficiency can play a significant role.
- They explore if alternative fuels can replace oil.
- They investigate if people will accept carbon rationing through carbon credits.

In reality, we will need a mix of different ideas to be successful.

This is all aimed at taking pupils beyond their usual responses to the climate crisis and towards more realistic solutions to the challenges we face, bridging between ideas pupils can do themselves and ideas bigger than they can do alone.
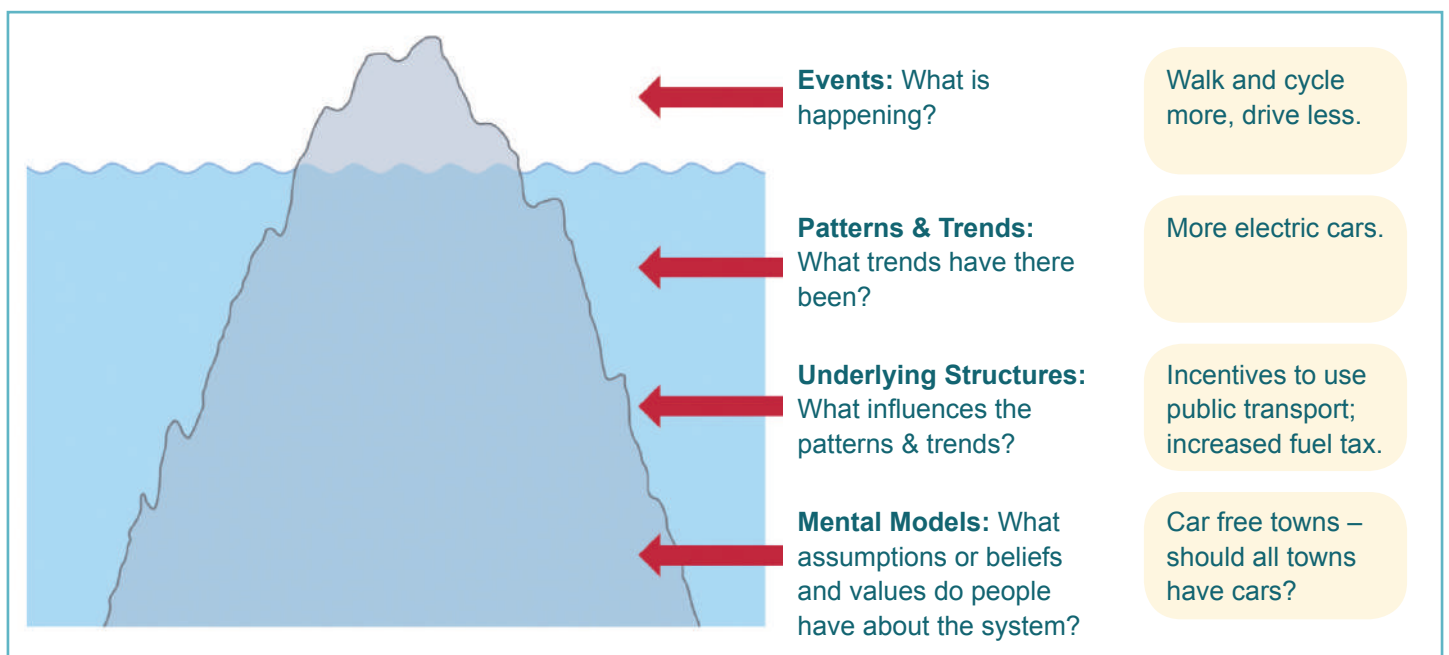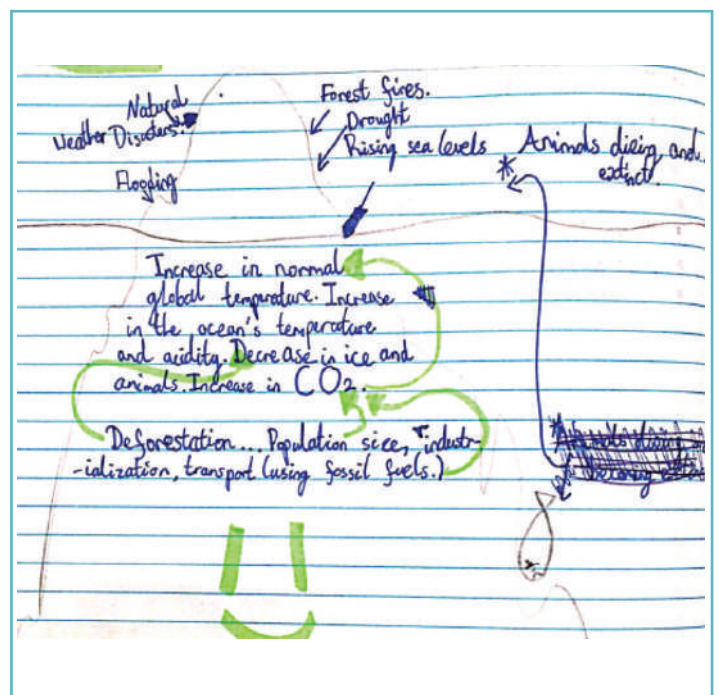
Other ways the cards can be used include:

They can be introduced in the 'village of the future today' activity. Which ideas would you like to bring into your village of the future?

A spheres of influence model can be used to ask who might be able to bring selected ideas into reality, and what the role of pupils might be.

- Pupils might think about which ideas can be implemented quickly in the next few years, and which will require more time.
- Reflection could be made on which ideas might have the biggest impact.

You will find reference to the Futures Cards in the activity below. All the cards are available to download (see Annex 1) and print.

Events: What is happening?	Walk and cycle more, drive less.
Patterns & Trends: What trends have there been?	More electric cars.
Underlying Structures: What influences the patterns & trends?	Incentives to use public transport; increased fuel tax.
Mental Models: What assumptions or beliefs and values do people have about the system?	Car free towns – should all towns have cars?

Activity 1. Valuing the Future.

In this activity, pupils explore kinds of values which will be important in creating the future they want.

"We did the values activity last week and tied it in with values in RE – we are looking at it from that angle now, which of these values would you pack for the future? Which are most or least important and why? Which have you seen in action? Then we could move onto other things …" – Year 6 teacher.

1. Pupils individually select five values that they think will be important to carry into the future; then share in pairs or small groups. We have prepared a set of 21 cards (see annex 3) based on values that are widely-held by people throughout the world. Pupils can select from or adapt statements when doing this (some of these values are discussed further as part of **Teacher Support – the climate crisis**). How do the values align with those of your school?

2. In debriefing this activity, look at figure 1 (values) in the teacher notes. Discuss with pupils how people with strongly intrinsic values tend to be happier and have more pro-environmental values. Those with strongly extrinsic values tend to be less happy and have weaker environmental values. So, emphasising intrinsic values will tend to be better for tackling the climate crisis. Even The Economist discusses the uneven relationship between money and happiness (**https://youtu.be/FFHerwNXTzk**).

3. Do pupils want to rethink the selected values?

You might find the Common Cause Handbook a useful resource to read before using this activity (**https://valuesandframes.org/resources/CCF_report_ common_cause_handbook.pdf**).

Activity 2. The village of the future is here today.

We think this approach will be particularly useful if you are working with younger pupils.

"I wouldn't have thought of using the plasticine one [the village of the future]. We made plasticine models of here, now and then they did what they wanted to change in their second model, what they wanted to change, like more bikes instead of cars" – Year 6 teacher.

"I enjoyed making play-dough sculptures and what it is like with and without climate change" – Year 6 pupil.

1. Pupils briefly revisit past or present maps of the local area (i.e. ones that they have already looked at).

2. Using craft materials, recycled cardboard, plasticine or other suitable materials, they create a simple model of the area local to the school … as it is today.

3. They thought-shower ideas about what makes a place a good one for people and for nature. This might be a good opportunity to introduce the Futures Cards (see Annex 1). You can also suggest pupils think about all the things a town needs to provide for its inhabitants – can these be included into their model?

4. Using stickers or votes, they select four of these ideas (it may be useful to group similar ideas together using categories such as travel, homes, work, play etc).

5. They then change their model into the village (or neighbourhood) of the future: adding, removing or changing elements based on the four ideas they have adopted. This might be another good opportunity to introduce the Futures Cards.

6. This could become a 'stage set' for the story they want to tell, with play figures perhaps serving as guides and a mobile phone taking images from ground level.

7. Discussion points:

• How well does the neighbourhood of the future match up with the ideas that pupils have agreed on? Does it need adjusting at all?

• How well would it meet the need of different people (such as those on the role cards in Part 1)? What might they say about it?

• If plants, birds, bees or wild animals could talk, what might they say about it?

• What could we start (or stop) doing now to begin creating this neighbourhood?

• Which values and ideas that they have looked at might they want to carry forward into their story?

8. What if pupils enacted the school of the future today? They model the whole school, from teaching to energy? It might be so good some of the changes stay!

As pupils move towards creating their digital stories, they might want to revise their ideas about their desirable future and discuss whether there are any changes or adjustments they want to make to their original ideas.

Another opportunity is to consider if there are ideas relating to making/influencing changes at different scales (personal, community, region, national, global) and of different types (technological, behavioural, environmental, etc)? Pupils will need a good balance of these things if their ideas are to bring about successful change.

Pupils might like to use their model villages to tell their digital story – keep them safe.

Activity 3. Other future visioning approaches.

There are several other approaches to future visioning. Some commonly used ones are:

V for Visions – in this activity, pupils draw a large V onto flipchart paper. The V is a timeline from the present into the future. On one axis of the V pupils write their ideas for a desirable future, and on the other axis what might be 'business as usual.'

Backcasting – in this technique, pupils vision what their preferred future might be like, and then they work out the steps to get there from today. For more details see https://www.naturalstep.ca/abcd.

Good News Bad News – pupils use the role cards from Part 1 to consider their initial ideas about change from the perspective of others.

Activity 4. Game plan for change.

Having established some imaginative ideas about the future and some initial thoughts about how change might be achieved, pupils revisit frameworks they have used when looking at other change-makers to test their ideas. This will help them settle on the ideas about change which can form the basis for their digital stories.

1. Pupils evaluate their ideas about their own change-making, using an adapted version of the Part 2 interview framework (see Annex 4). They could also revisit the types of change-maker that they considered in Part 2.

2. Having considered the change as a whole (their vision and aims), pupils list some of the things they will need to do or influence in order to achieve it.

3. What will they need to do first in order the bring about the change? For example: I want to go to the moon. Step one - where is it?

4. What follows on from that? (I want to go to the moon. Step two – design a rocket). And who needs to act? (Annex 2 – Circles of Change might be helpful)

5. Maybe pupils can get a few 'ducks in a line'? (At this stage, it is more important that they are exploring ideas and raising questions than creating a full and plausible game plan).

6. What happens when? Some actions might be quick and simple, others taking longer. It can be helpful to think what might happen in 5 year's time, 10 years, 15 years and 20 years. The Futures Cards (Annex 1) might be helpful here.

7. Discussion point. What obstacles might there be to doing these things? How might these be overcome?

8. By the end of this activity, pupils should have started to settle on initial ideas about the changes they want to make. These can be modified, but will start to form a basis for their digital stories.

Making change happen – external links

There are a number of online resources that support people in becoming effective change-makers. The following are aimed specifically at children and young people:

- ACTive Citizenship Award resources: **https://www.teachingcitizenship.org.uk/resource/active-citizenship-award-resources-inspire-you**

- Young people on the global stage - Advocacy and influencing support materials for young leaders: **https://tidegloballearning.net/sites/default/files/files/32_%20Advocacy%20guide.pdf**

The following are designed for adults or older teenagers but offer useful ideas and resources that pupils may wish to draw on:

- Campaign Bootcamp resources: **https://campaignbootcamp.org/resources/**

- Global climate strike skill-ups: **https://globalclimatestrike.net/join-our-online-skill-ups/**

- Sheila McKechnie Foundation - **https://smk.org.uk**
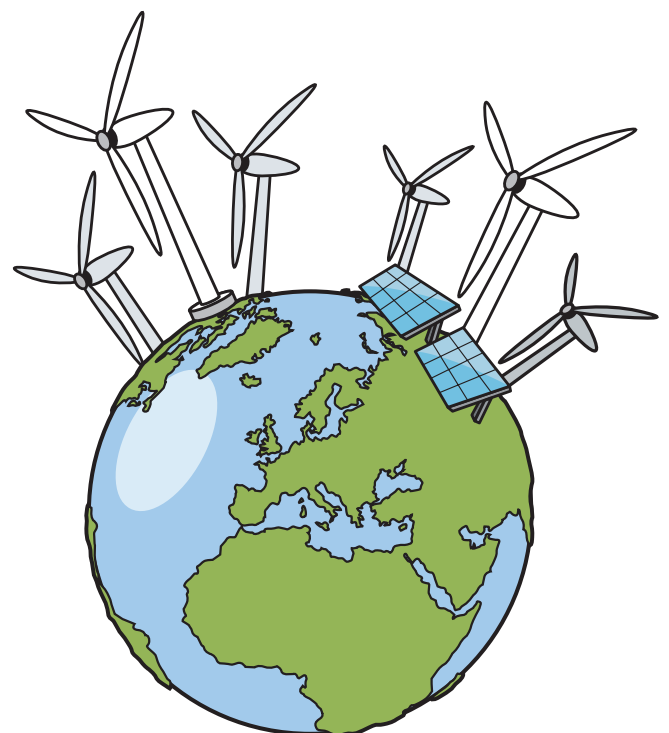
Step 2. Think about your audience

Activity 1. Thinking about audiences.

It is useful for pupils to visualise the person who they imagine as the audience for their digital story.

Working in small groups, pupils draw a person who they think would be an ideal audience for their story. They then label the relevant body parts, based on the following questions:

- Why would this story matter to this audience? (i.e. does it reach their heart?)

- Why would this story interest this audience (i.e. does it reach their head?)

- Is there a message you want to get across to them by telling them the story?

- Why is it important that this audience hears the story? What might they do with it? (i.e. does it reach their hands?)

- What kind of language do you think they use? Is it simple or complicated? It's probably best to tell your story in the kind of language they feel most comfortable with (i.e. does it reach their ears?)

Pupils might also want to think about how their imaginary audience is going to understand the story. Might they be visually impaired? If they are, then they may not be able to see a video. Might they have hearing difficulties? If they do, they may struggle to make out the words in an interview. Some of the people who see the story will be living in countries where few people speak English – how can the story hold their attention? There are lots of things that pupils can do to make a story accessible to the widest possible audience - we cover this is in **Teacher Support – making digital stories**.

Ears

Head

Hands

Heart

Step 3. Write your story

By this stage, pupils should have examined their ideas about the future and started to identify what they want to tell a story about … and to whom.

"They are building stuff to animate out of pipe cleaners and clay to tell their story. It's not necessarily got a professional finish, but they have characters, they did a lot more with what is there than I thought they might be able to with what they had. My advice to teachers is not to worry too much if there's not the latest, right kit. Kids will find a way."
– Year 6 teacher.

Activity 1. Story starting.

To start with, pupils can just write their story down on paper or on whatever word processor they use. They do not need to worry about how they are going to tell the story yet – just to think about what the story is and write it down as simply as possible.

1. Ask pupils to think about how they would tell the story to a close friend.

2. How will they grab their attention?

3. How will they keep the friend interested?

4. Pupils may want to try this as a paired-talk activity before they start writing.

5. It may help to tell pupils that, to start with, you are not concerned about accurate punctuation or spelling: at this stage, it is more important to get it written than to get it 'right'.

"I most enjoyed planning and getting smarter! And getting the story ready and having visitors! I love stories!"
– Year 6 pupil

Activity 2. What sort of story?

The following activity offers story forms that might be useful. Different story forms have their strengths and weaknesses in terms of the project, the story that pupils want to tell and its potential audience.

Story maps – Most schools will have their own versions of this strategy. How might you adapt models that pupils already know so as to help them create compelling digital stories? There is a very sophisticated online model at ESRI and ARCGis which pupils could use for inspiration – **https://storymaps-classic.arcgis.com/en/how-to/**

Storytelling techniques for presentations – Sparkol is a company creating storytelling and animation software. They also have great suggestions on storytelling summarized below (**https://www.sparkol.com/en/blog/8-classic-storytelling-techniques-for-engaging-presentations**).

A Hero or Heroine story – This story form, familiar from many traditional tales, starts with a hero and/or heroine and the landscape/context they find themselves in. They are faced with a problem or dilemma; there is a helper (human/animal/tool/magical power) and the story ends with a resolution. You can find lots of guidance online, including here - **https://creativeenglishteacher.com/pages/teaching-joseph-campbells-the-heros-journey**.

A few other potential forms and sources of inspiration:

- Online book on digital stories for change - **https://open.umn.edu/opentextbooks/textbooks/the-changing-story-digital-stories-that-participate-in-transforming-teaching-learning**

- Online digital stories course: **https://www.coursera.org/learn/digital-storytelling**

Our Austrian partners, University of Graz, suggest the following outline of seven common elements that can enhance a digital story. How might you help pupils incorporate some of these into their story-making?

1. Point of View – what is the perspective of the author?

2. A Dramatic Question – a question that will be answered by the end of the story.

3. Emotional Content – serious issues that speak to us in a personal and powerful way.

4. The Gift of Your Voice – a way to personalise the story to help the audience understand the context.

5. The Power of the Soundtrack – music or other sounds that support the storyline.

6. Economy –using just enough content to tell the story without overloading the viewer with too much information.

7. Pacing – related to Economy, but dealing with how slowly/quickly the story progresses

Step 4.   Create a storyboard

Activity 1. Storyboard it!

1. People often like to create initial storyboards in the form of a cartoon comic strip.

2. Alternatively, pupils could use an app like Padlet, PowerPoint or Word to create the storyboard.

3. Pupils can make their storyboard with pen and paper if they prefer.

4. In creating their storyboard, invite pupils to think about all the photos, videos, maps, text or other ingredients that will make up each stage of your story.

There are lots of free storyboard templates available online.

Step 5.   Research and gather elements

Activity 1. Gathering.

1. At this stage, pupils research and bring together all the elements of their story.

2. Pupils will have already researched and collected many great ingredients which could go into the story, such as old pictures or maps of the local area; new images for comparison; messy walls; model villages; washing lines; change-maker profiles; recordings of interviews and elevator pitches etc.

3. What else do they need to add, find or create?

Step 6.   Build your story

Activity 1. Building.

Note – this step will take the most time on Part 3…do leave sufficient time.

Teacher Support – digital tools, offers support on a range of digital tools which can be used. It can be tempting to use lots of digital tools, but valuable to reflect if these improve the story telling or not. Time is also a big factor. For example, making good stop-go animations will take time whereas a clear PowerPoint presentation with speech is quicker and simpler. Remember, the key is to tell powerful stories that are clear to the target audience.

*"Creating our stop-motion 'is fun and you get to create your own future' " – Year 6 pupil*

1. Pupils select the app or digital format best suited to their story (and the desired audience).
   Teacher Support – digital tools will help them in this.

2. Pupils assemble and sequence the digital story elements, based on the narrative in their storyboard.

3. They gather peer feedback on their story prior to it going 'live' and amend it accordingly.

4. The story goes live on the Change the Story website – see below for details, or on your own school webpages.

5. Before the story goes live, it may be a good idea for pupils to carry out Step 7.

Sharing stories on the Change the Story website

Please visit the Change the Story **website** for details about how to share your stories.
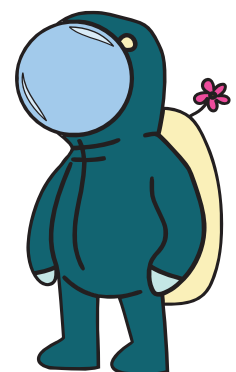
Step 7. Reflect on your story

Activity 1. Self-reflection.

Pupils reflect for themselves on their stories.

- What was your story about?

- What tools did you use to create your story?
    - Word processor
    - Video
    - Audio
    - Blog
    - Maps
    - Other

- Are you happy with your story?

- Write down:
    - One thing that you learned about change
    - One thing that you learned about making stories
    - One thing you learned about using digital tools

Pupils could return to the audience profile they created earlier (see Step 2) and recall what they wanted their audience to:

- One thing we want our audience to hear as a result of our story (Ears)

- One thing we want our audience to think as a result of our story (Head)

- One thing we want our audience to feel as a result of our story (Heart)

- One thing we want our audience to do as a result of our story (Hands)

1. How will they know this has happened? (it may not always be possible to do so)

2. Is there anything they can send out with the story that will help them know this? (e.g. a short questionnaire or reply slip, a call to action that can be monitored, such as 'please tell other people about this'). Maybe they could even use the 'ears, hands, heart, head' format for this? (they will want to organise this before their story goes live) How can they make this easy, interesting or enjoyable for their audience to do?

3. What will they do with this information once they have received it? Might it, for example, add further impact to their story?
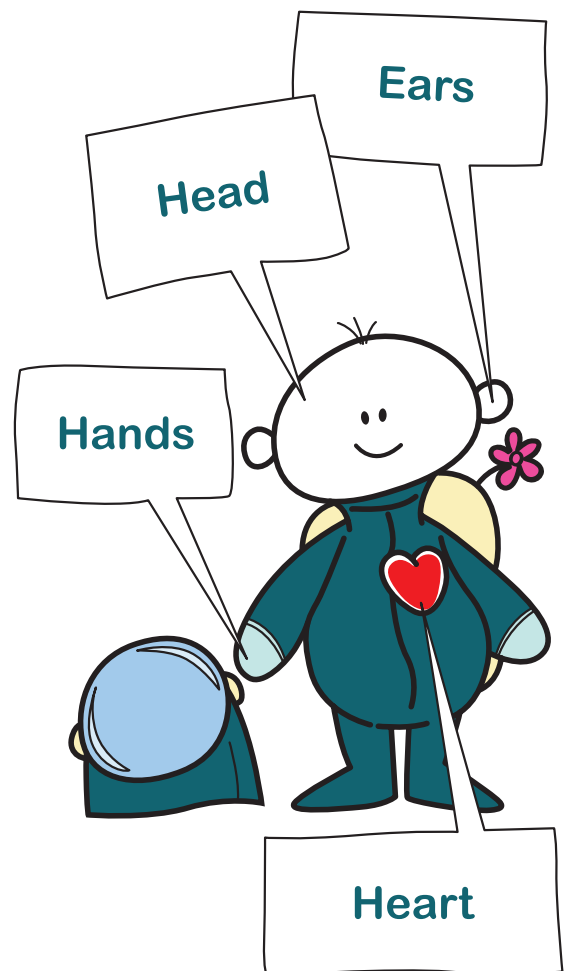
Ears - why change matters

Head - why our plan is a good idea

Heart - belief that positive change can happen

Hands - take responsibility for making changes at work and home

Annex 1: Futures Cards.

Transport and Mobility

Car Free Towns

Imagine if... towns and city centres were car free. In the UK, one-third of carbon emissions come from transport, with private cars contributing the most. What could we do with all the extra space?

This is already happening in many cities across Europe.

All Cars Electric

Imagine if... all cars were powered by electricity rather than petrol. There are already 260,000 electric cars in the UK, as well as 535,000 hybrid cars (electric & petrol).

Several car makers have committed to stop making petrol cars before 2030.

Autonomous Taxis

Imagine if… nobody owned a car. When you wanted to travel you used your phone to call a autonomous taxi to pick you up and take you to your destination. This would remove thousands of parked cars and make space for other activities in towns.

These cars are being tested on roads today.

A Bicycle Friendly Town

Imagine if… your town was designed for bicycle use more than cars. Imagine if bicycle lanes gave bicyclist priority over cars and made it safe for everyone to use their bikes.

Many towns are taking this very seriously, and succeeding (17% increase in cycling from 2019 to 2020).

Eating

Vertical Farming

Imagine if… rather than growing food on the ground it could be grown vertically. This way, much more food could be grown in urban areas and reduce food miles and water use.

Called vertical farming, this is already competing with traditional farms.

Becoming a Flexitarian

Imagine if… we chose to eat more plant-based meals and reduced fish and meat in our diets. This could have many benefits for health and animal welfare, not just reducing emissions. If every family ate one extra vegetarian meal each week this would result in the equivalent of 16 million less cars on the road.

Protein from Insects

Imagine if… insects provided our protein. Insects are a very high source of protein and can be grown in a small area, unlike cows, pigs and sheep. Many people already eat them, in fact 2000 species are eaten worldwide. Crickets produce 80% less methane than cows. So about your next burger is made from insects?

Reducing Food Waste

Imagine if… all the food we grew was eaten. Roughly one third of the world's food is never eaten, which means land and resources are used, and greenhouse gases produced unnecessarily.

A 50% reduction in food waste could reduce carbon emissions by 10 gigatons by 2050.

Shopping and Consuming

Nothing was Thrown Away

Imagine if… everything we bought from computers to carpets was made to be taken apart and remade. Then the computer of today could become the table or chair of tomorrow.

Called the Circular Economy, many firms are already planning how to do this.

Renting Clothes

Imagine if… the next time you needed clothes for a special occasion, rather than buying them you rented them. Rental services for clothes are appearing in many towns and cities. Currently, fashion accounts for 10% of global carbon emissions and nearly 20% of wastewater.

Mushroom Packaging and Coffee

Imagine if… packaging was made to be thrown away. Unlike plastic, packaging grown using mushrooms can be simply composted and is low in carbon emissions.

You can also use waste coffee grinds to grow mushrooms which are high in protein, further reducing waste.

Bacteria Eating Waste

Imagine if… our plastic waste was eaten by bacteria. Rather than using expensive, and polluting, machines to deal with our waste, scientists have discovered a type of bacteria that eats plastic. There is a lot more research to be done, and it will be at least 10 more years before you will be able to feed your plastic bottles to bacteria.

Energy

Algae Fuels

Imagine if… instead if digging oil from the ground we 'grew' oil instead. As algae grows it takes CO_2 from the atmosphere. The algae can then be used to create a biofuel to replace petrol in cars. When biofuels are burnt CO_2 is released – but much less than petrol. There is still a lot to learn but it could be a significant help.

Wind Power

Imagine if… we all owned a wind turbine. Public support for wind power is high, but some people do not want wind turbines near to their home. Wind already supplies 25% of UK electricity, could we all help to buy more wind turbines? And even place them at sea rather than next to houses?

Carbon Credits

Imagine if… if everyone had their own carbon allowance. Carbon credits mean everyone has the right to use a fixed amount of carbon each. For example, if you want to take a car journey you will need to use some of you carbon credits – more if it is a petrol car. They already used by the EU to encourage businesses to reduce carbon.

Energy Efficiency

Imagine if… we could do the same things with less energy. Designing products to use far less energy will help us keep using the devices we love but with far less energy. All modern appliances include an energy efficiency rating – look out for A+ rated products.
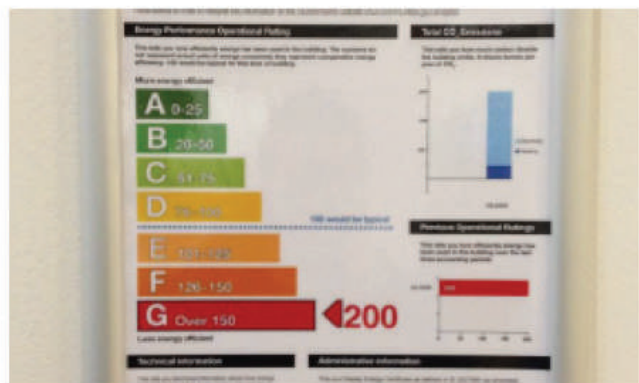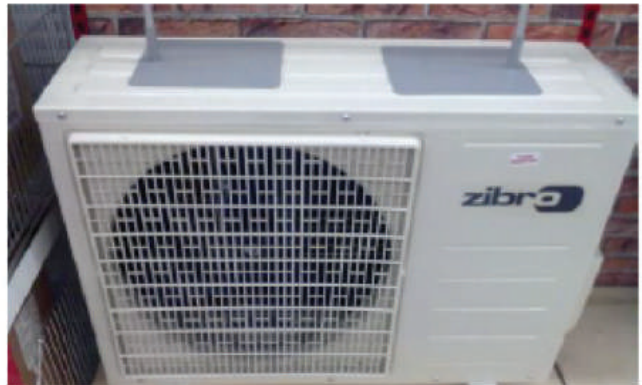
Buildings

Cooling by Termites

Imagine if… we learnt lessons from nature. Termites cleverly keep their mound at a constant temperature with no external power source. Architects have copied this to design buildings which cool air as it enters buildings and keeps the people in side cool.

Air Source Heat Pumps

Imagine if… we can use the air surrounding our houses to heat them. Air source heat pumps extract heat from outside air to heat your home and hot water, even when the temperature is -15°C. Heat pumps could reduce CO_2 emissions by 80% if renewable energy is used.

Bricks from Fresh Air

Imagine if… building bricks are grown. Cement is the source of 8% of global carbon emissions. The company bioMASON have been inspired by coral to grow bricks. They use bacteria to grow cement, which when mixed with sand in a mould creates a new brick.

Insulation

Imagine if… all the heat we produced stayed inside our homes rather than leaking outside. Insulating floors, walls and lofts, together with better windows, could reduce heat loss by 50%. And if this happens, we will need less energy to keep our homes warm.

Wild Cards

Restore Tropical Forests

Imagine if… we double the area of tropical forests on the planet. They used to cover 12% of the land area but now cover only 5%. By restoring more tropical forests we are restoring their function as carbon sinks, and supporting biodiversity, the wate cycle, conserving soil, producing food, medicine, and providing places for adventure.

Greening Cities

Imagine if… rather than concrete we created urban forests and meadows. Greening our towns and cities can help to keep us cool, improve habitats for humans and animals, and plants also reduce harmful air pollution. Imagine walking to school everyday through a woodland rather than a pavement.

Climate Silence

Imagine if… everyone talked about the climate crisis. Despite knowing how serious the climate crisis is, we do not talk enough about it. One reason is that too much negative news is not attractive. Can we produce positive stories about how tackling the climate crisis will lead to better lives for everyone?

Better Cooking Stoves

Imagine if… around 3 billion people cook on open fires or basic stoves using wood, charcoal and animal dung. These cooking practices release 2-5% of all greenhouse gas emissions. Providing these people with advanced biomass stoves can cut emissions by 95%, making them better for the planet and healthier for their users.

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Web resources for teachers to explore more

More ideas from - **https://drawdown.org/solutions**.

Zero Carbon Britain reports (Making It Happen – see postcards from the future) - **https://cat.org.uk/info-resources/zero-carbon-britain/research-reports/zero-carbon-britain-making-it-happen/**

Annex 2: Circles of Change

SPHERE OF INFLUENCE:
What they can affect

SPHERE OF ACTION:
What they do

World

Country

Community

School

Me
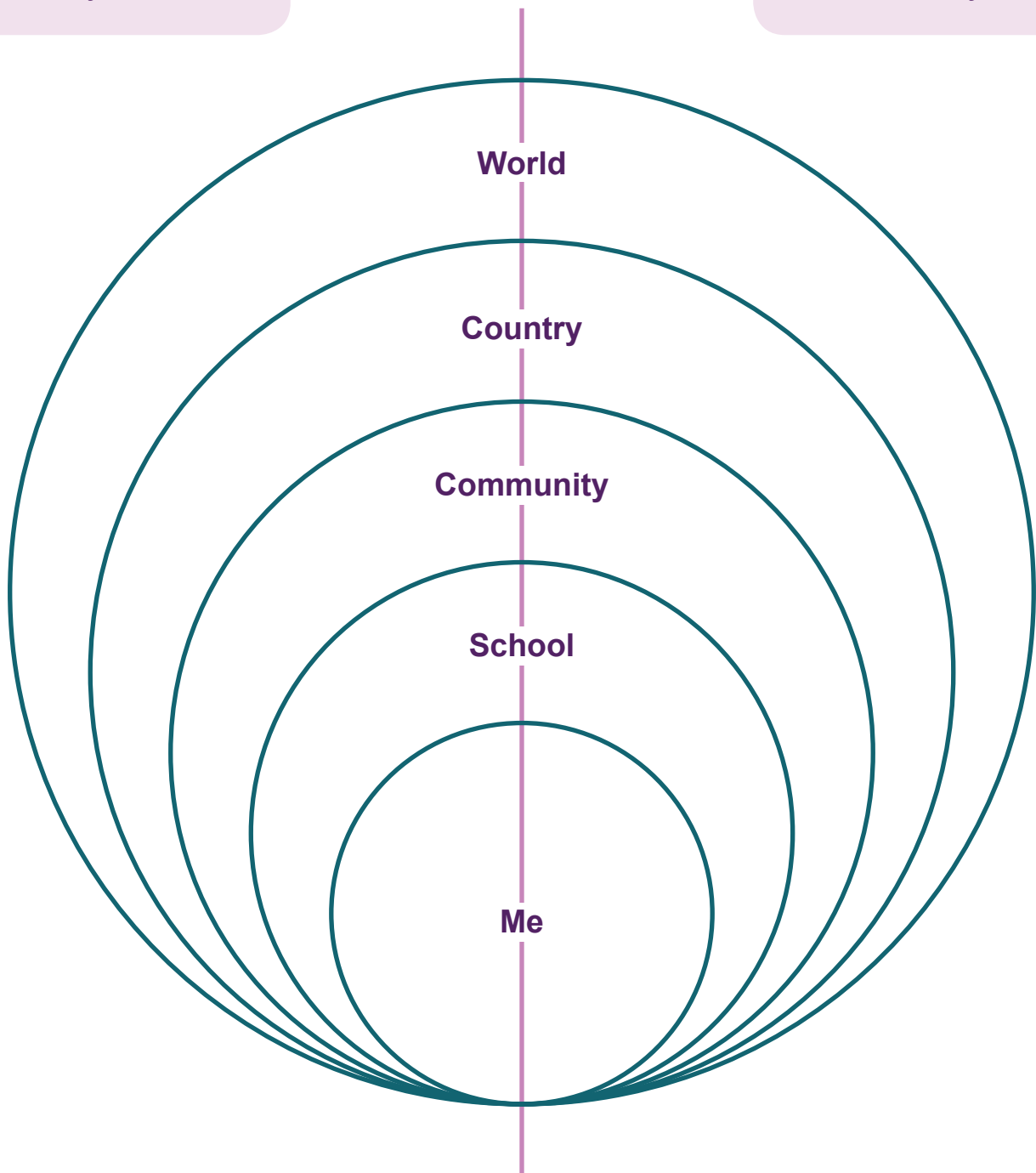
Annex 3: Values to carry into the future

The statements on these cards have been adapted from the Common Cause Handbook (2011), which identifies 58 things that people commonly say they value in life, wherever in the world they may be.

To make it manageable for primary-age pupils, we have shortened the list and simplified the language involved. We have tried to keep at each one value from each of the ten main groups of values that Common Cause identified. However, pupils may well identify important values which are not on our list.

A sense of belonging	A world at peace	Achieving success
Being healthy	Being humble	Care for nature, including people
Creativity	Enjoying	Equality
Finding excitement	Freedom	Having fun
Having respect & authority	Keeping safe	Kindness to those around us
Obedience	Politeness	Respect for tradition
Responsible	Self-respect	Variety & adventure

Once pupils have individually selected the values they think are important for the future, they could discuss their choices in pairs or small groups. The values might seem clear at first glance, however, it is worth spending some time clarifying how values influence us. The notes below are offered for you (the teacher) to mediate this conversation. You will find that values can contradict each other: personal success vs equality; freedom vs obedience. Discussing where the balance lies, and how values influence us, is a useful conversation.

The values align with different groupings of values:

Self-direction values   **Intrinsic values**

Freedom   Equality

Creativity

                                                Care for nature,
                                                including people
Finding   Variety &
excitement   adventure
                                        A world at peace
Having fun
                                                      Kindness of
Self-respect   those around us

                        Responsible
Enjoying life
                                                       Being humble
                        Politeness

                                                 Respect for
                  Being healthy   tradition

Achieving
success   Keeping safe

                                    Obedience

        Having respect
        & authority

                          A sense of
                          belonging

Extrinsic values   **Traditional values**

Figure 1 - Values

Interestingly, people with strongly intrinsic values tend to be happier and have more pro-environmental values. Those with strongly extrinsic values tend to be less happy and have weaker environmental values. So, emphasizing intrinsic values will tend to be better for tackling the climate crisis.

Be careful about mixing values. Values often work like a see-saw, strengthen intrinsic values and extrinsic values will weaken. But promote both together then there is no change.

Values Descriptions

A sense of belonging: this is about feeling that others care about me. If people feel left out of change towards a better future, will this make change harder to achieve? How do we ensure all people feel included?

A world at peace: a world free from war and conflict. People will have different ideas about what the future should bring. Can we recognise the needs of others and negotiate with each other?

Achieving success: all about achieving personal goals. Can personal and societal goals complement each other? Can we be personally successful without society providing schools, hospitals and other public services we rely on? How do we balance the desire for personal success with the need for society to work together?

Being healthy: not being sick physically or mentally. If people are fit and healthy, they are much more likely to want to engage and be part of change. How can new changes encourage healthy lifestyles?

Being humble: modest and self-effacing. Perhaps the opposite to the social media world which encourages us to 'talk ourselves up.' Being humble might lead to each of us demanding less material wealth; will this be a good thing?

Care for nature, including people: this is about how humans fit into and are a part of the natural world. What will the future be like if humans destroy nature and its capacity to provide services such as clean air, fresh water and fertile soil? Can we live apart from nature?

Creativity: uniqueness, imagination. Creativity is often seen as a personal trait. How can we balance the need for creative solutions to the climate crisis and the necessity for countries to work together in addressing the climate crisis?

Enjoying life: enjoying food, leisure, games, etc. We all need enjoyment to feel alive. Can we enjoy life without damaging the natural world we depend upon? Should personal pleasure take priority over the needs of society? Where is the balance?

Equality: equal opportunity for all. Can change be successful if only a few benefit?

Finding excitement: seeking adventure and new experiences. These can make us feel alive but are often just about 'me'. How should we balance a desire for personal excitement and adventure against the needs of others and the planet?

Freedom: free to think and act. We cherish our 'right' to do as we please, but is this the best way to reach shared goals?

Having fun: stimulating experiences. From food to football we seek experiences that give pleasure and release boredom. This can lead to regular swings from boredom to pleasure and back again. Is this helpful?

Having respect and authority: being recognised by others as important; having a good public image. Today's social media world encourages personal image over the group; how do we balance the needs of the individual and wider society?

Keeping safe: ensuring the people you care about are safe. All change involves some risk. If, change feels like a threat, will people take part?

Kindness to those around us: honest, helpful and promoting harmony with friends and family. Creating change requires being honest about the mistakes of the present, but how can we do this kindly and avoid a blame culture?

Obedience: meeting your obligations. We have rules we need to follow, but what if those rules to not help tackle the climate crisis or even make it worse? Change might require new rules.

Politeness: good manners. Listening to people carefully and speaking calmly are good qualities. How do we debate and discuss new ideas, and try to persuade people, whilst also being kind and polite?
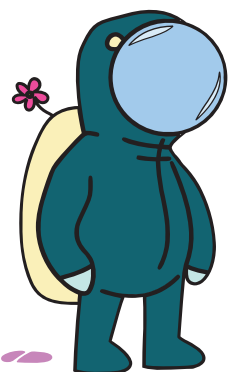
Values Descriptions *(continued)*

Respect for tradition: preserving customs. Are all traditions useful and helpful? Do some restrict us in making positive change? In the past, the tradition was for only men to vote in elections; we changed this tradition because society agreed equality is more important in this case.

Responsible: dependable, reliable. We all have to play our part in change, people need to be reliable if change for the benefit of all it to be achieved. This might require not having things our own way all of the time, how can we convince people this is a good idea?

Self-respect: belief in oneself. We need to trust our own abilities, but also listen to others and be prepared to change our minds. How do we decide when others' ideas are better or our own need to be listened to?

Variety and adventure: excitement, novelty and new challenges. All these things can keep us engaged in life and looking forward to change. How can we promote solutions to the climate crisis as exciting and a new adventure?

The Common Cause Handbook can be downloaded for free at **https://valuesandframes.org/resources/CCF_report_ common_cause_handbook.pdf**

Annex 4: Gameplan for Change.

What is your idea for change?	
What change do you hope to bring about?	

How big or small is this change meant to be?	Very small and local	Quite small	Medium	Quite big	Very big - world wide

How do you see this having an effect on the climate crisis? **(e.g. how your activity reduces carbon emissions, raises awareness, protects the environment, helps protect people from climate change effects, stores carbon etc)**	
Is there an attention-grabbing story or statistic about this activity?	
Any other crucial information	

Change the story.

Creating new climate stories across Europe