A3 ACTIVITY 1: VISUALISING: WHY SUSTAINABILITY? IS THERE ENOUGH LAND FOR EVERYONE?

Background

It can be difficult for students to understand sustainability as it relates to their everyday lives. The following activity uses a map of the world and an apple to demonstrate visually why urgent management of our energy resources is so important.

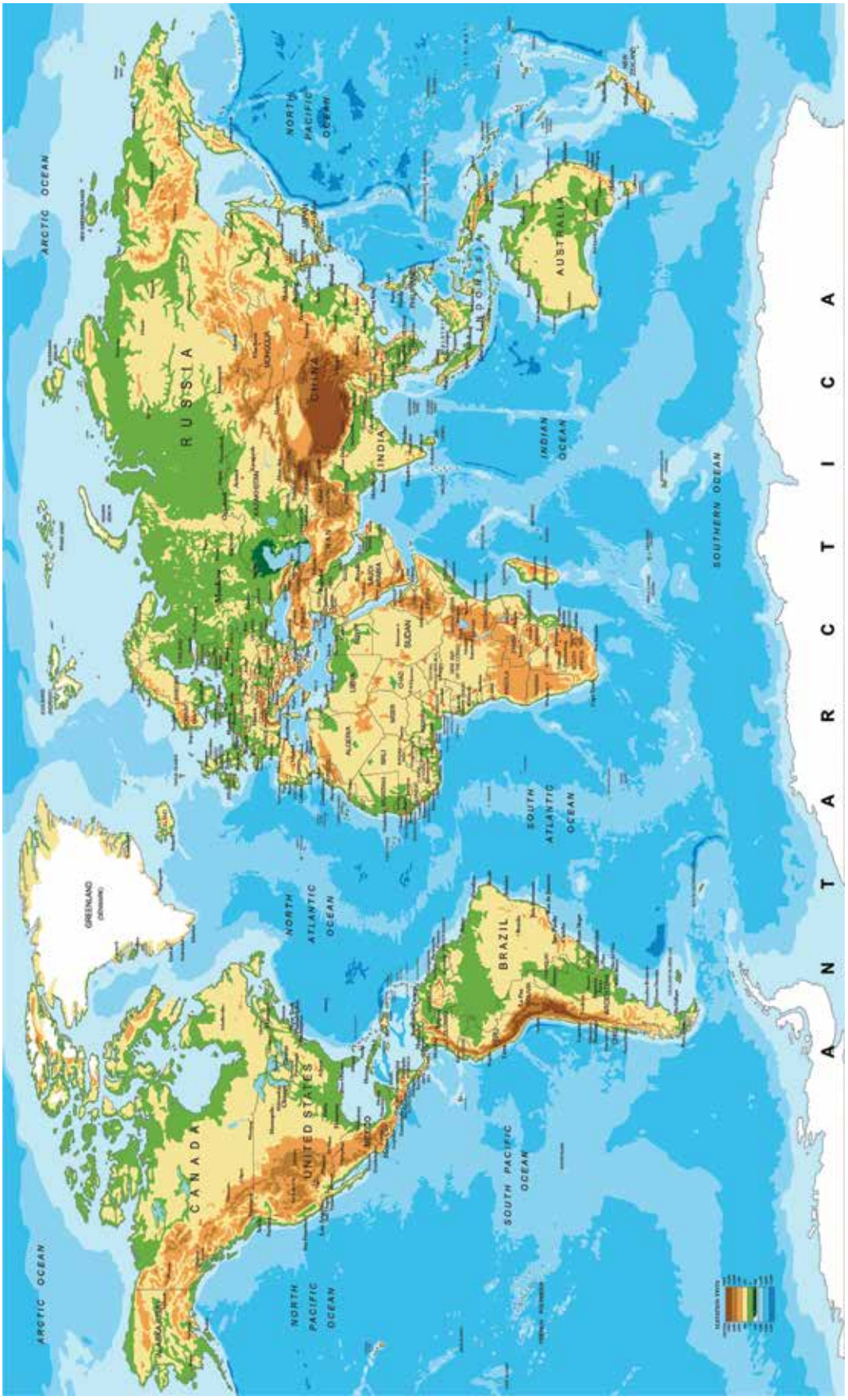
The apple is divided into segments representing water and land (arable, habitable, etc.), and these areas are marked off on the map.

Equipment required:

- Melon (for a class demonstration) or one apple per pair of students – the fruit represents the Earth
- Knife
- Map of the world (marking the topographical features if possible)

What to do:

1. Print out copies of the map below and give one to each pair of students, or a large class size map will suffice.
2. Explain to the class that the fruit represents the planet Earth.
3. Divide the apple or melon into quarters.
4. Set three of these quarters aside, explain that they represent all the water on Earth and will be revisited later. Mark all the water areas on the map.
5. Explain that the remaining quarter of the fruit represents the land, then divide this segment into half giving you two one-eighth pieces of the world (half of a quarter).
6. Explain that one of the eighths represents land which is inhospitable (i.e. not suitable for people to live on). Set it aside. Mark on the map what land you would consider inhospitable, for example, mountains, deserts…
7. Referring to the already marked map, ask the class if there is much land which is not marked?
8. Divide the second eighth into four equal pieces. Explain that three of these pieces represent poor areas for producing food: areas covered by buildings, roads, cities, factories, 'out-of-town' shopping centres, etc.
9. Carefully peel the skin off the last eighth. Explain that the skin represents all the arable land on the surface of the Earth.
10. Ask the class if they have any comments on the amount of land in the context of the Earth's population? Is there enough to sustain a growing population?
11. Return to the three quarters that were set aside (in step 4 above) – explain that though these represent all the water on the planet, not all the water is potable. Ask the class to look at the map and, if possible, to estimate how much of the water is potable.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