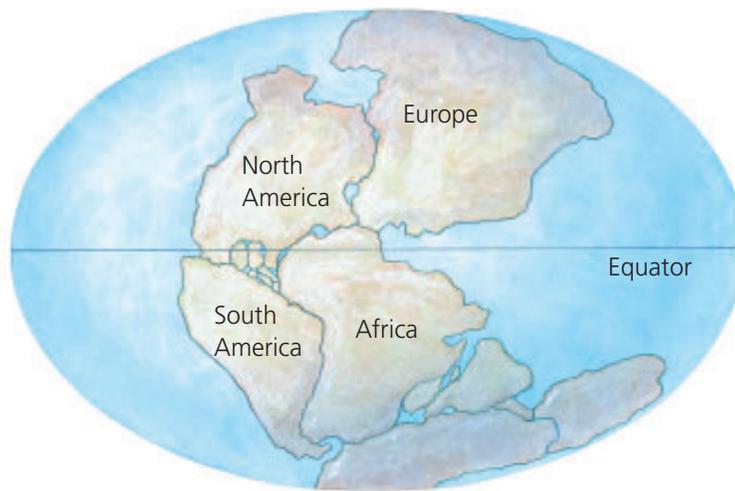


LEARNING TIP

For a review about creating models, see the Skills Handbook section "Creating Models."

Creating a Model of Pangaea

Imagine that you are Alfred Wegener in the early 1900s. You are excited about your new hypothesis that today's separate continents were once joined together as Pangaea. You have evidence from the observations of other scientists, but the other scientists have different explanations for their observations. You are having a lot of trouble convincing them that your hypothesis about Pangaea could be correct.

**Problem**

You want to make a model that will summarize all the evidence for Pangaea. You do not have the luxury of modern technology. You must use very simple materials to make your model.

Task

Using only the simple materials provided, develop a model of Pangaea. Your model must show Wegener's evidence for Pangaea, including evidence from the shapes of the continents, the fossil record, landforms, and an ancient ice age.

Criteria

To be successful, your model must

- be an accurate model of Pangaea
- include Alfred Wegener's evidence for Pangaea
- be made with only the materials listed

Plan and Test

Materials

- modelling clay in various colours
- paper or thin cardboard
- coloured pencils or markers
- dinner knife



Handle the knife carefully. Always cut away from yourself and others when using a knife.

Procedure

1. Using the materials listed above, make a model that shows Wegener's evidence for Pangaea.
2. Check your model against the criteria. Does it meet all the criteria?
3. If your model does not meet all the criteria, try again.

Evaluate

1. How does your model work? Does it show all of Wegener's evidence?
2. How is your model like the real Earth? How is it different?

Communicate

3. Draw a diagram to show how your model works.
4. What other materials could you use to make a model like this? List these materials, and explain how you would use them to represent moving continents. With your teacher's permission, create a new model. Compare your new model with your modelling-clay model. Which model is better? Why?



CHECK YOUR UNDERSTANDING

1. What are some of the limitations of your models?
2. Why are models useful?
3. Where else are models used to demonstrate ideas or represent real things?