

## GEOGRAPHY · GRADES 5–6

# Maps vs Globes

Why every flat map is a little bit wrong

## The problem

The Earth is (roughly) a sphere. A flat map is, well, flat. You can't peel a sphere onto flat paper without something getting stretched, squashed, or torn. Mapmakers have to **CHOOSE** what to distort. Different choices give different maps.

## Three famous projections

| Projection                  | Strength   | Distortion  |
|-----------------------------|--|---|
| Mercator (1569)             | Straight lines = compass directions. Great for ships.      | Massively enlarges areas near the poles. Greenland looks bigger than Africa — it isn't. |
| Peters / Gall-Peters (1855) | Country sizes are correct.                                 | Country shapes look distorted (countries near the equator look stretched vertically).   |
| Robinson (1963)             | A compromise — sizes and shapes both close-ish to reality. | No single thing is exactly right, but nothing is dreadfully wrong.                      |

## Discuss

1. Why might it **MATTER** if Africa looks small on a map?
2. When would a Mercator map be useful (despite the distortion)?
3. Globes are accurate — why don't we use them all the time?
4. Look up: how big is Africa really? You could fit the US, China, India and most of Europe inside it.



