

What Do You Know About Migration Methods?

Name

Date

Migration is the movement of a species from one place to another. Read about the types of migration in the numbered list below. For each, circle whether you think that migration method might be used by humans, animals, or by both. Please brainstorm an example of an animal that might use this method of migration.

1. Genetics: Some scientists believe that migratory routes are genetically inherited from parents.

Humans

Animals

Both

Reasoning: _____

2. Mental maps: Rather than a paper map, a mental map is carried in the mind and includes known landmarks, such as rivers, trees, and mountains. Simple migrations, such as altitudinal migrations (up and down a mountain) can be navigated with a mental map.

Humans

Animals

Both

Reasoning: _____

3. Sun and moon: Some migrations follow the sun as it crosses the sky from east to west. Clouds, time of year, and moving at night can make it impractical to use the sun as the only cue for direction.

Humans

Animals

Both

Reasoning: _____

4. Stars: Stars can be used to navigate a course over land and sea. Stars such as Betelgeuse and the North Star are used often, most likely because those stars are very bright and often easily visible.

Humans

Animals

Both

Reasoning: _____

5. Written maps: Some movements rely on detailed directions that show where to go in a scaled-down version of the real-life environment, using symbols to represent landmarks.

Humans

Animals

Both

Reasoning: _____

6. Magnetic field: The Earth has a magnetic field. Scientists are not sure exactly how the magnetic field is used in some migration routes.

Humans

Animals

Both

Reasoning: _____

7. Communication and signaling among individuals: Some individuals rely on group communication as they migrate to help with navigation.

Humans

Animals

Both

Reasoning: _____

8. Ocean currents: Ocean currents are driven by wind, water density, and tides. Some migrations use ocean currents to get from one place to another.

Humans

Animals

Both

Reasoning: _____

9. Smell: Over small distances, or at specific locations on a migratory path, scents can guide migrations. For example, the scent of rain on the dry Serengeti soils can be used to direct migrations to reach greener pastures.

Humans

Animals

Both

Reasoning: _____
