**Guided Notes: Impacts of Climate Change**

Climate change is causing significant impacts on \_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_ patterns, and \_\_\_\_\_\_\_\_\_\_\_\_ systems worldwide.

**Key Concepts:**

• Ecosystem changes:

 - Earlier \_\_\_\_\_\_\_\_\_\_\_\_ and bloom dates for plants

 - Shifts in animal \_\_\_\_\_\_\_\_\_\_\_\_ patterns

 - Changes in species \_\_\_\_\_\_\_\_\_\_\_\_ (e.g., fish moving poleward)

• Loss of ice:

 - Shrinking \_\_\_\_\_\_\_\_\_\_\_\_ ice sheets

 - Weakening of the \_\_\_\_\_\_\_\_\_\_\_\_ stream

 - Impacts on species like \_\_\_\_\_\_\_\_\_\_\_\_ bears

• Sea level rise:

 - Caused by melting ice and \_\_\_\_\_\_\_\_\_\_\_\_ water

 - Predictions of \_\_\_\_\_\_ to \_\_\_\_\_\_ feet rise by end of century

 - Threatens coastal cities and \_\_\_\_\_\_\_\_\_\_\_\_-lying islands

• Changes in weather patterns:

 - More frequent and intense \_\_\_\_\_\_\_\_\_\_\_\_

 - Increased \_\_\_\_\_\_\_\_\_\_\_\_ (average 2 mm per decade globally)

 - More powerful \_\_\_\_\_\_\_\_\_\_\_\_

 - Extreme events: droughts, floods, heat waves

• Ocean impacts:

 - Absorption of excess \_\_\_\_\_\_\_\_\_\_\_\_ and CO2

 - Increasing ocean \_\_\_\_\_\_\_\_\_\_\_\_

 - Threats to marine organisms with \_\_\_\_\_\_\_\_\_\_\_\_ or hard skeletons

**Real World Examples:**

1. Washington D.C. cherry blossoms: Peak bloom now occurs \_\_\_\_\_\_ days earlier than 100 years ago.

2. Sugar maple trees: Changing conditions may push their habitat \_\_\_\_\_\_\_\_\_\_\_\_.

**Word Bank:**

ecosystems

weather

ocean

flowering

migration

ranges

polar

jet

polar

warmer

1

4

low

wildfires

precipitation

hurricanes

heat

acidity

shells

five

northward