**Amazing Planet – Glaciers (32:05 – 40:00)** Name: \_TEACHER\_\_\_\_\_\_\_

1. What is a glacier?

HUGE SHEET OF SNOW AND ICE COMPACTED AND BUILT UP OVER TIME INT OA ROCK SOLID MASS.

1. Explain how glaciers are a time capsule?

BECAUSE IT CARRIES ICE THAT CAN BE 100,000s OF YEARS OLD

ALSO CARRIES DUST AND SEDIMENT FROM LONG LOST ERAS

1. Approximately how much of the world’s surface is in glacial ice? How much of the world’s fresh water?

1/10 OF THE WORLD’S SURFACE IS GLACIAL ICE

¾ OF THE WORLD’S FRESH WATER IS IN GLACIERS.

1. List the places where glaciers are located.

ANTARCTICA; GREENLAND; ICELAND; AFRICA; PATAGONIA

1. How fast do glaciers move?

100 FEET A DAY; SOMETIMES A FEW INCHES

1. What is a cirque?

IS A GLACIER THAT FORMS A NOOK ON THE SIDE OF A MOUNTAIN

1. What is a valley glacier?

A GLACIER THAT FLOWS BETWEEN MOUNTAINS; THEY ERODE THE VALLEY FLOOR

1. What is a piedmont glacier?

WHEN TWO OR MORE VALLEY GLACIERS MERGE

1. What is an erratic?

A HUGE ROCK CARRIED BY GLACIERS HUNDREDS OR THOUSANDS OF MILES.

1. Explain how glaciers shaped the Scablands of the Pacific north-west.

16,000 YEARS AGO 🡪 GLACIAL DAM MELTED 🡪 RUSHING WATER ERODED LAND OVER A FEW DAYS 🡪 PROCESS STARTED OVER AGAIN

1. How thick do scientists think the ice sheets were when the covered the whole planet?

½ MILE THICK

1. How did this ice age end?

VOLCANIC ERUPTIONS 🡪 CLOUDS OF ASH TRAPPED GREENHOUSE GASSES 🡪 INCREASED TEMPERATURE MELTS GLACIERS

1. What has happened to the Muir Glacier between 1899 and 2003? What is this a sign of?

THE MUIR GLACIER DISAPPEARED; THIS IS A SIGN OF CLIMATE CHANGE/GLOBAL WARMING

1. How high could sea levels rise if the entire Greenland Ice sheet melts?

20 FEET