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HOW FAST IS YOUR GLACIER MOVING?

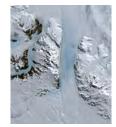
Scientists are measuring glacier movement in the polar regions to see how fast ice is moving into the world's oceans. Ice that moves from the land into the oceans contributes to rising sea level. Check your glacier against these famous polar glaciers!



ANTARCTICA'S PINE ISLAND GLACIER = UP TO 31 FT/DAY (This fast flowing glacier on the West coast of Antarctica empties into the Amundsen Sea)



GREENLAND'S JAKOBSHAVN ISBREA (GLACIER) = UP TO 113 FT/DAY (This is the fastest moving glacier in the world, emptying into Disko Bay off the west coast of Greenland)



ANTARCTICA'S BYRD GLACIER = UP TO 9.5 FT/DAY (This glacier drains an extensive area from the East Antarctic Ice Sheet into the Ross Ice Shelf)



YOUR GLACIER!

PLACE YOUR GLACIER AT THE LINE MARKED "4 INCHES
START HERE". USE A STOPWATCH AND TIME HOW LONG IT
TAKES THE LEADING EDGE OF YOUR GLACIER TO TRAVEL TO
THE BOTTOM OF THE GRID, NOW CALCULATE:

1) 0 .3 FT IN_____MINUTES X 3 = * ____MINUTES TO TRAVEL <u>1 FOOT</u>

2) SO HOW FAR WILL IT GO IN A DAY? CALCULATE MINUTES IN ONE DAY:

60 MINUTES IN ONE HOUR X 24 HOURS IN A DAY = 1,440 MINUTES/DAY

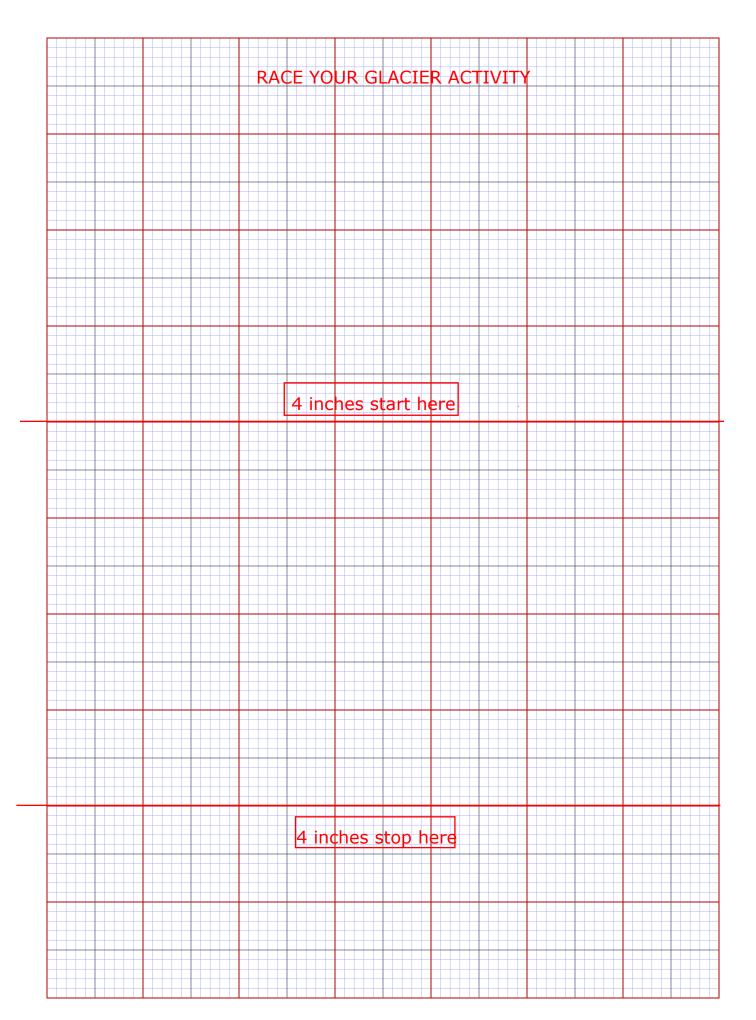
3) FOR YOUR ANSWER WE NEED 1440 /*____ YOUR TIME STARRED ABOVE HOW MANY FEET WILL YOUR GLACIER MOVE IN A DAY? ANSWER =

HOW DID YOUR GLACIER STACK UP AGAINST THESE POLAR LEGENDS?

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More Activities: http://www.ldeo.columbia.edu/polareducation



POLAR I.C.E. (Interactive Climate Education)

GLACIER GOO

For Use in Modeling Glaciers

Mix#1:

One 20 oz cup 1 stirring stick 3/4 cup warm water 1 cup Elmers white glue

Mix#2:

one 8 oz cup
1/2 cup warm water
one stirring stick (for the 8 oz cup)
2 tsp. Borax powder
1 qt plastic zip lock bag

Mix # 1:

In the large cup, add 3/4 cup warm water and 1 cup glue. Stir until well mixed.

Mix # 2:

In the smaller cup, measure 1/2 cup warm water. Add 2 tsp. of Borax powder. Stir

until the powder is dissolved.

Pour Mix 2 (the powder mix) into the glue mix. Stir until a glob forms and most of the water is mixed in. This happens quickly! Knead and work the mix for 2-3 minutes. Most, if not all, of the water will be incorporated into the mixture. Place the glacier goo in the zip lock bag.

The mixture will store for a few months.