Instructions for Analysis

STEP 1:

a. Use a metric ruler to measure the minimum distance in millimeters between mountain tops.

b. Based on these measurements, predict which populations will have the highest level of inter-breeding.

STEP 2:

Then using the genetic data (arrows), draw double-headed arrows to connect populations to signify the actual level of breeding between populations. More arrows show more connection, i.e. more breeding; fewer arrows show less connection, i.e. less breeding.

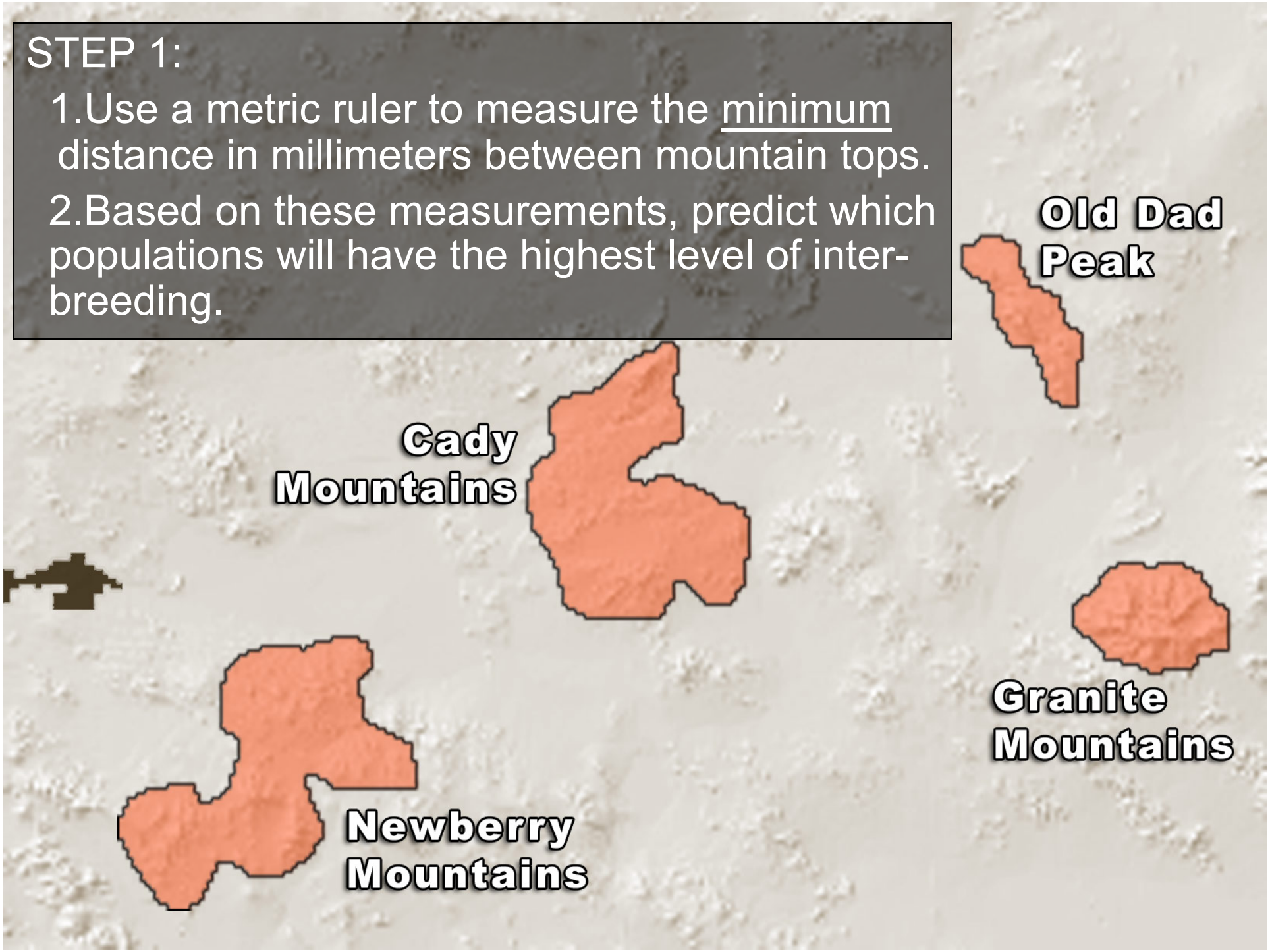
STEP 3:

a. Answer questions to compare your results from step 1 and step 2.

b. Predict where the highways are by drawing them on the map.

STEP 1:

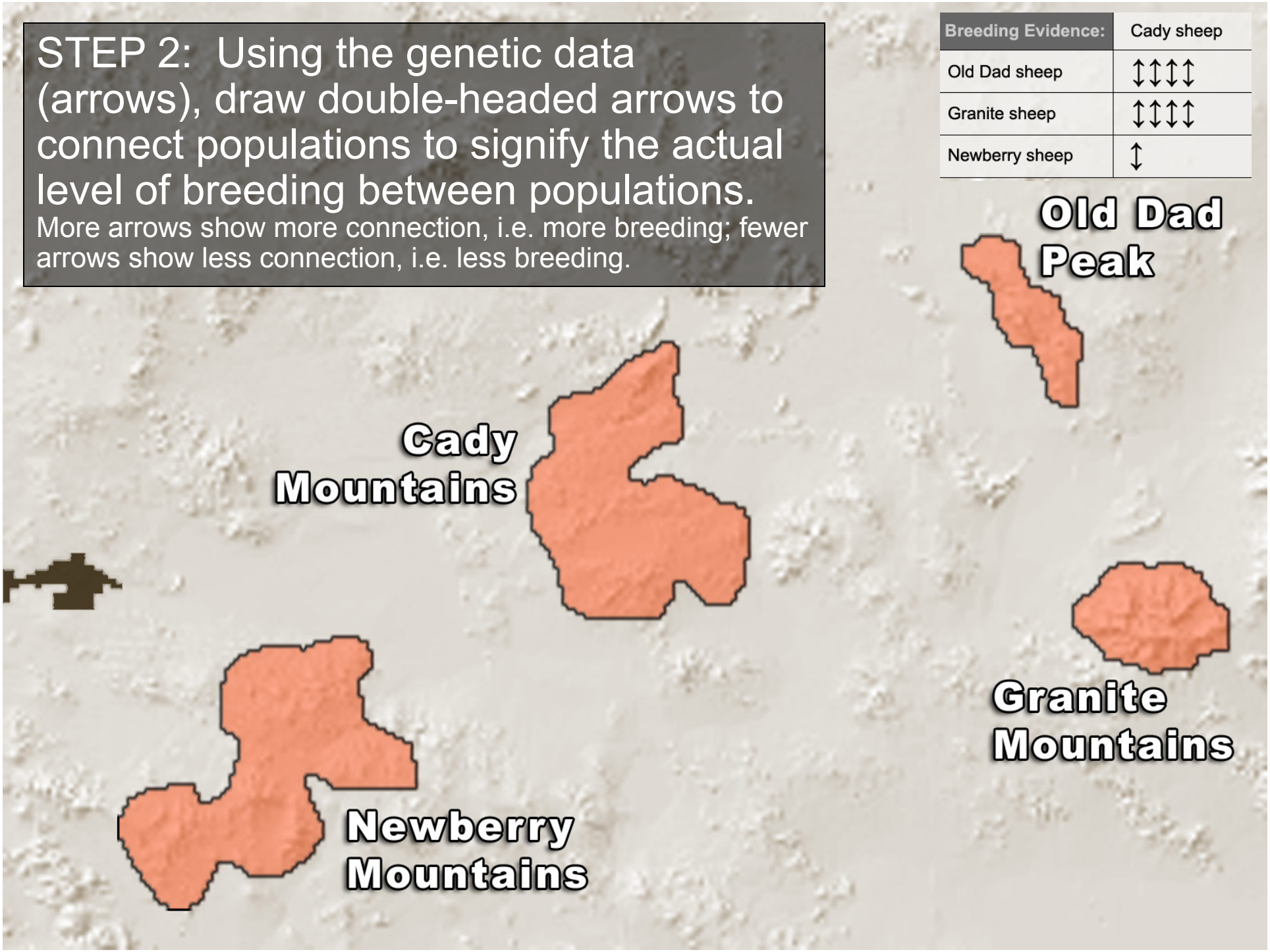
1. Use a metric ruler to measure the minimum distance in millimeters between mountain tops.
2. Based on these measurements, predict which populations will have the highest level of inter-breeding.



STEP 2: Using the genetic data (arrows), draw double-headed arrows to connect populations to signify the actual level of breeding between populations.

More arrows show more connection, i.e. more breeding; fewer arrows show less connection, i.e. less breeding.

Breeding Evidence:	Cady sheep
Old Dad sheep	↕↕↕↕
Granite sheep	↕↕↕↕
Newberry sheep	↕



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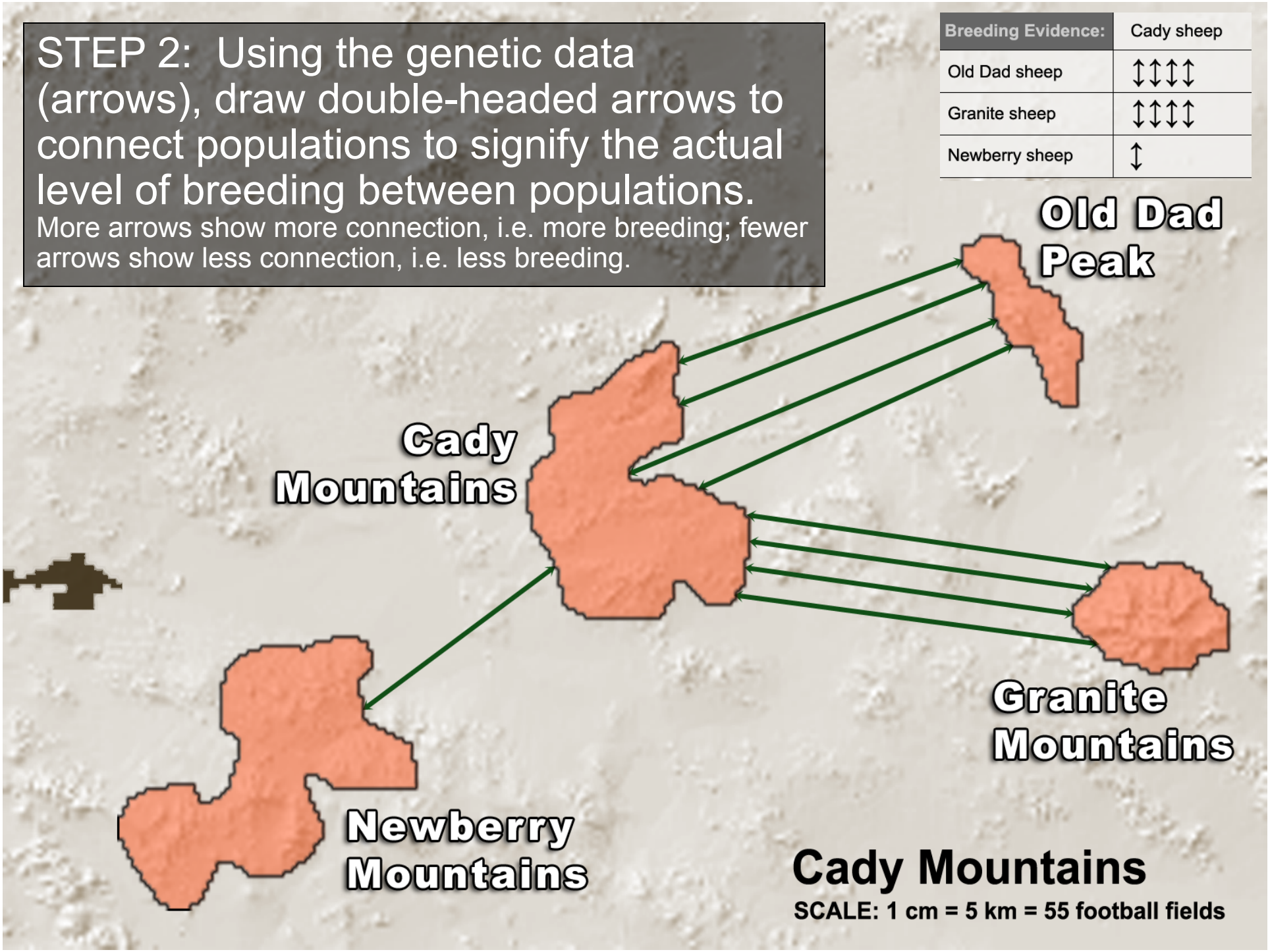
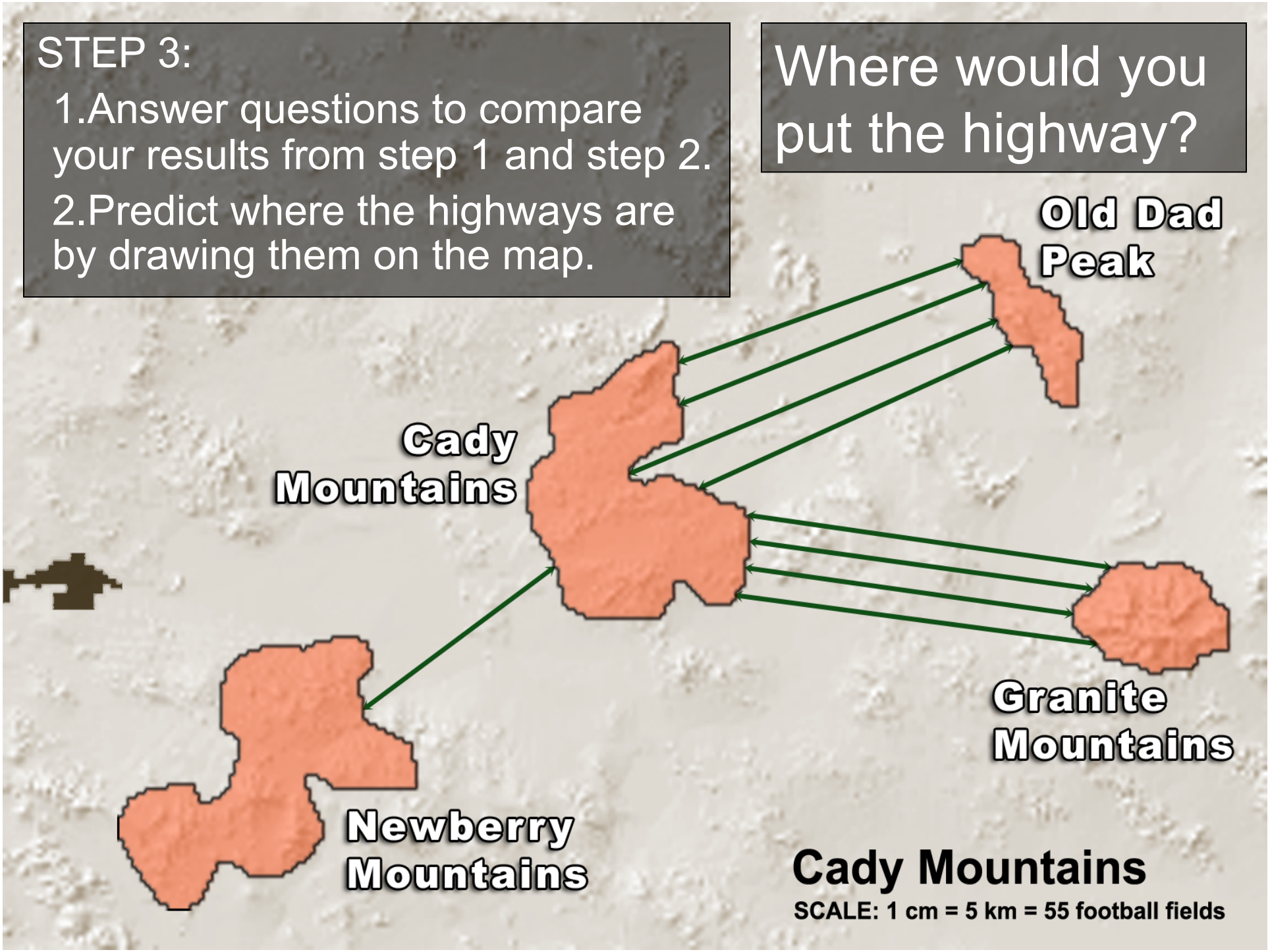
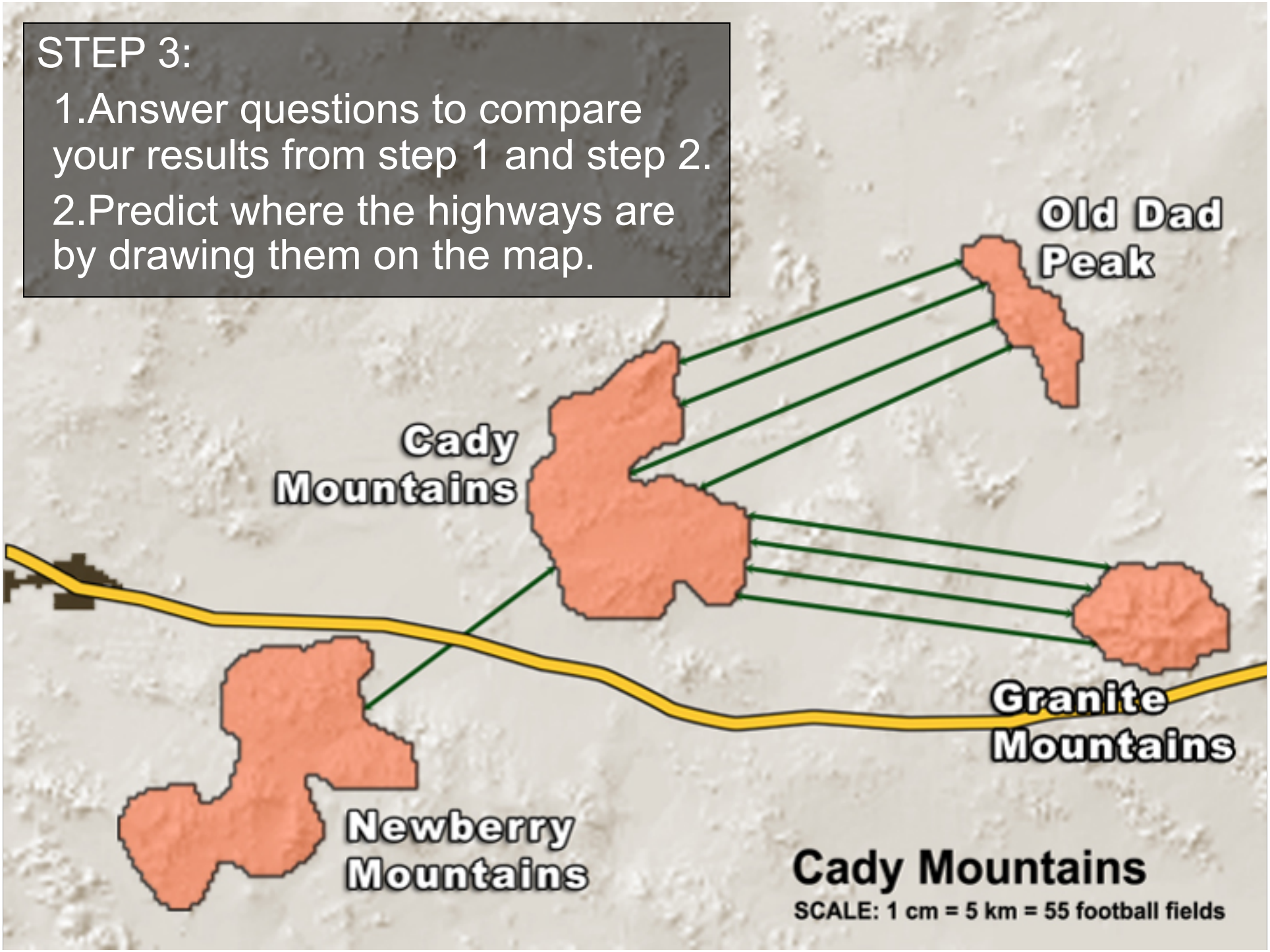


STEP 3:

1. Answer questions to compare your results from step 1 and step 2.
2. Predict where the highways are by drawing them on the map.

Where would you put the highway?




STEP 3:
1.Answer questions to compare your results from step 1 and step 2.
2.Predict where the highways are by drawing them on the map.
Old Dad Peak
Cady Mountains
Granite Mountains
Newberry Mountains
Cady Mountains
SCALE: 1 cm = 5 km = 55 football fields

After completing your analysis, transfer your data onto this overview map. Draw lines that signify the genetic data and draw highways based upon those line data.


LAS VEGAS
Clark
Indian Spring
Piute Range
Wood
Old Dad
Hackberry
Cady
Providence
Granite
Clipper
Newberry
Marble
South Bristol
Cushenbury
San Gabriel
San Gorgonio
LOS ANGELES
Little San Bernardino
Eagle-Lost Plains
Eagle-Buzzard Spring
Orocopeia
KEY
BIGHORN SHEEP POPULATIONS
URBAN AREAS
ROADS