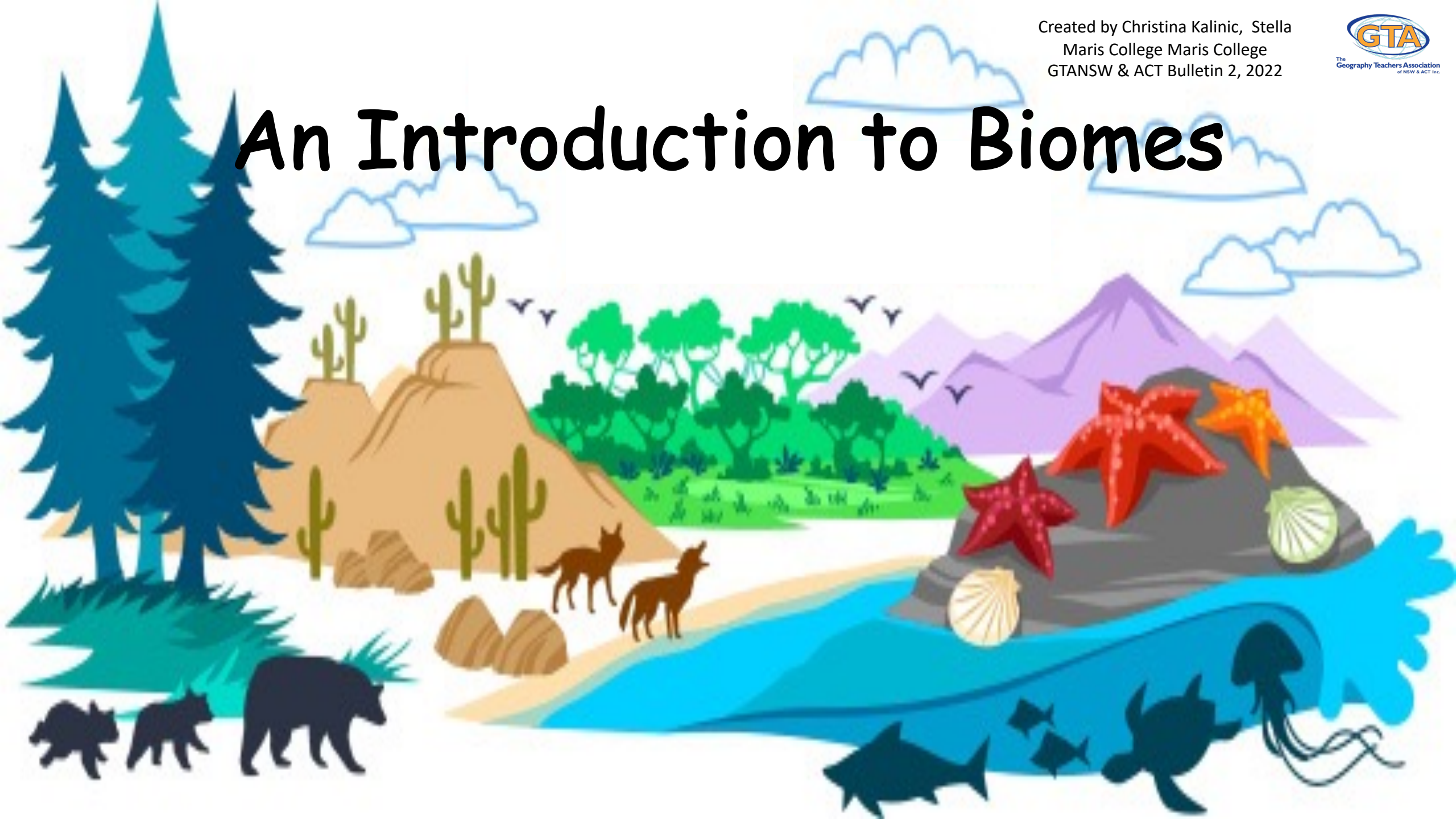


An Introduction to Biomes

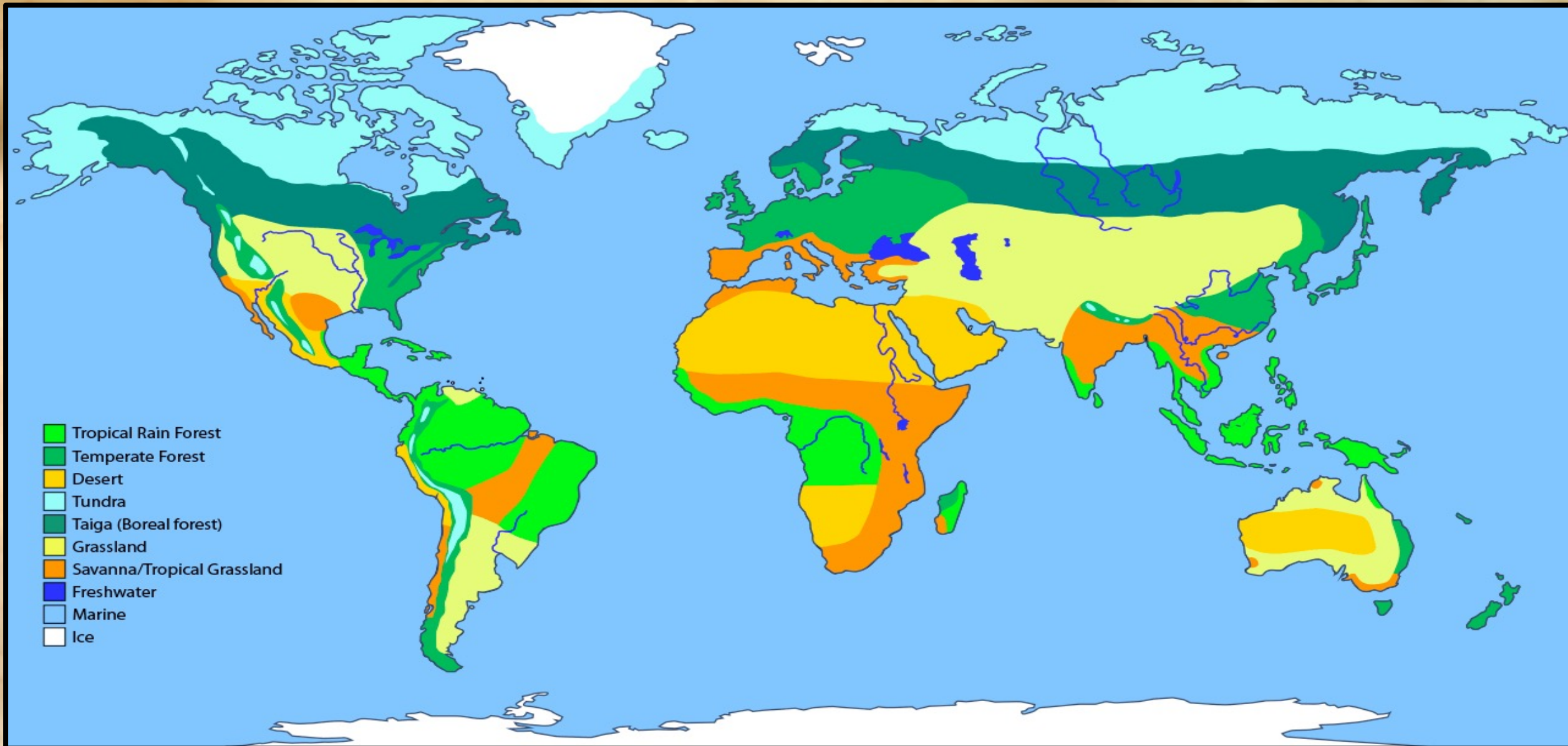


Defining Biomes

- ❖ The world is home to different environments or biomes, which are large ecosystems, each characterised by a particular climate and its dominant plants and animals.
- ❖ Biomes are divided into two broad groups;
 - 1) Aquatic or water-based ecosystems: *oceans, rivers, lakes and wetlands*
 - 2) Terrestrial or land-based ecosystems: *deserts, rainforests, tundra, grasslands, woodlands and forests*



Spatial distribution of biomes



Geographical Skill- Drawing a Pie Graph

- 1) Convert data into degrees using the formula:

$$\frac{\text{sector size} \times 360}{\text{total sample size}}$$

BIOME TYPE	COVERAGE (%)	DEGREES (°)
Desert	19	68.4
Boreal Forest	17	61.2
Tropical Forest	13	46.8
Temperate Grassland	13	46.8
Tundra	11	39.6
Savanna	10	36
Temperate Forest	8	28.8
Mountain	6	21.6
Scrub	3	10.8

HINT:
*this should total
to 100*

HINT:
*this should total
to 360*

- 2) Draw a circle using a compass
- 3) Draw a line from the centre of the circle to the 12o'clock position on the circumference

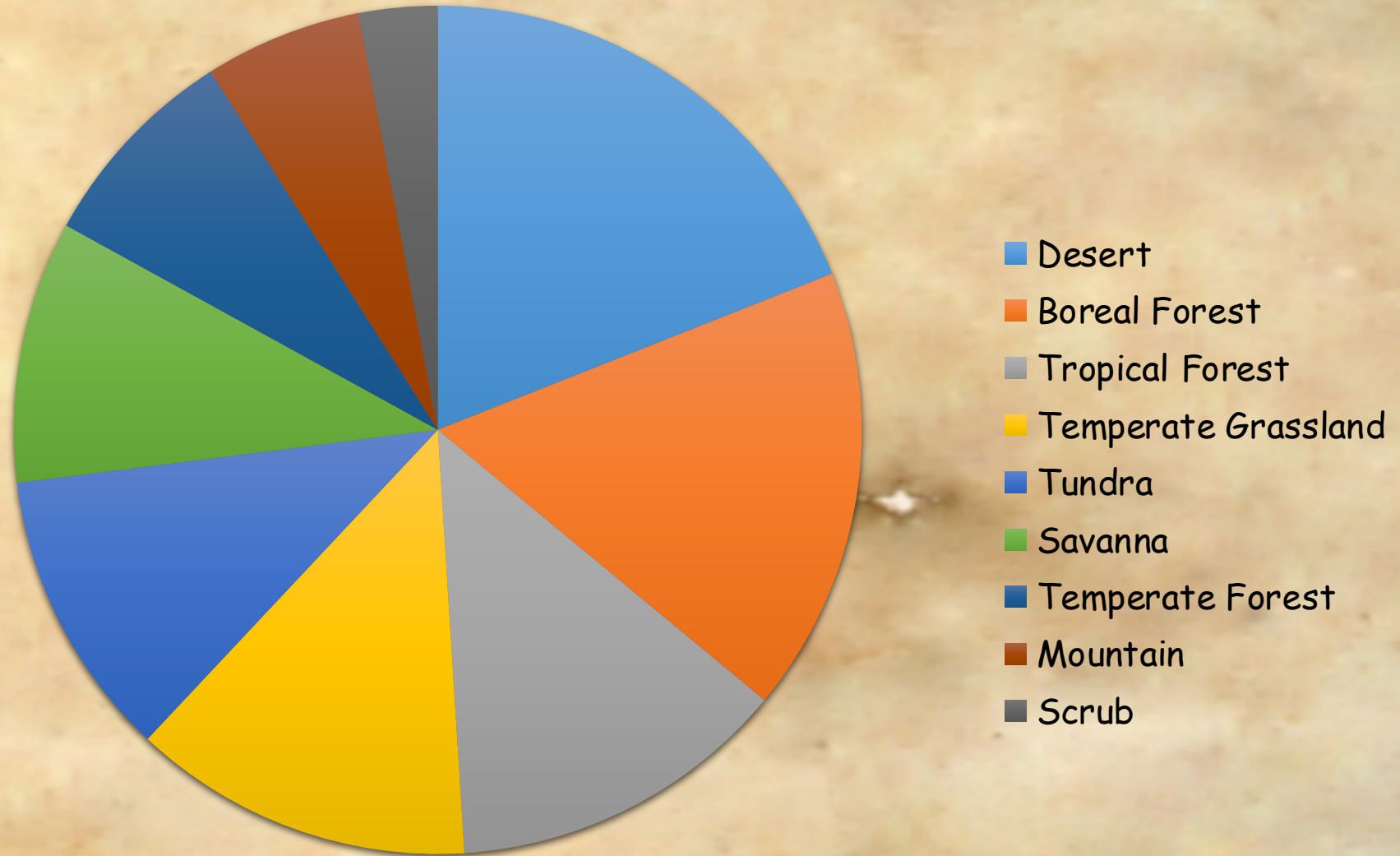


- 4) Use a protractor to divide the circle using your data and the centre point

USEFUL TIPS:

- ✓ Work clockwise from 12o'clock
 - ✓ Draw the largest sector first
- 5) Colour/shade each sector in a different colour, add labels and a title

WORLD COVERAGE OF BIOMES



Investigating Biomes

TASK:

- 1) Draw the table below in your Geography exercise book.
- 2) Record the temperature range and average rainfall for each biome.
- 3) Choose one plant and one animal for each biome type and name and sketch it.

BIOME TYPE	TEMPERATURE	RAINFALL	PLANTS	ANIMALS
Desert				

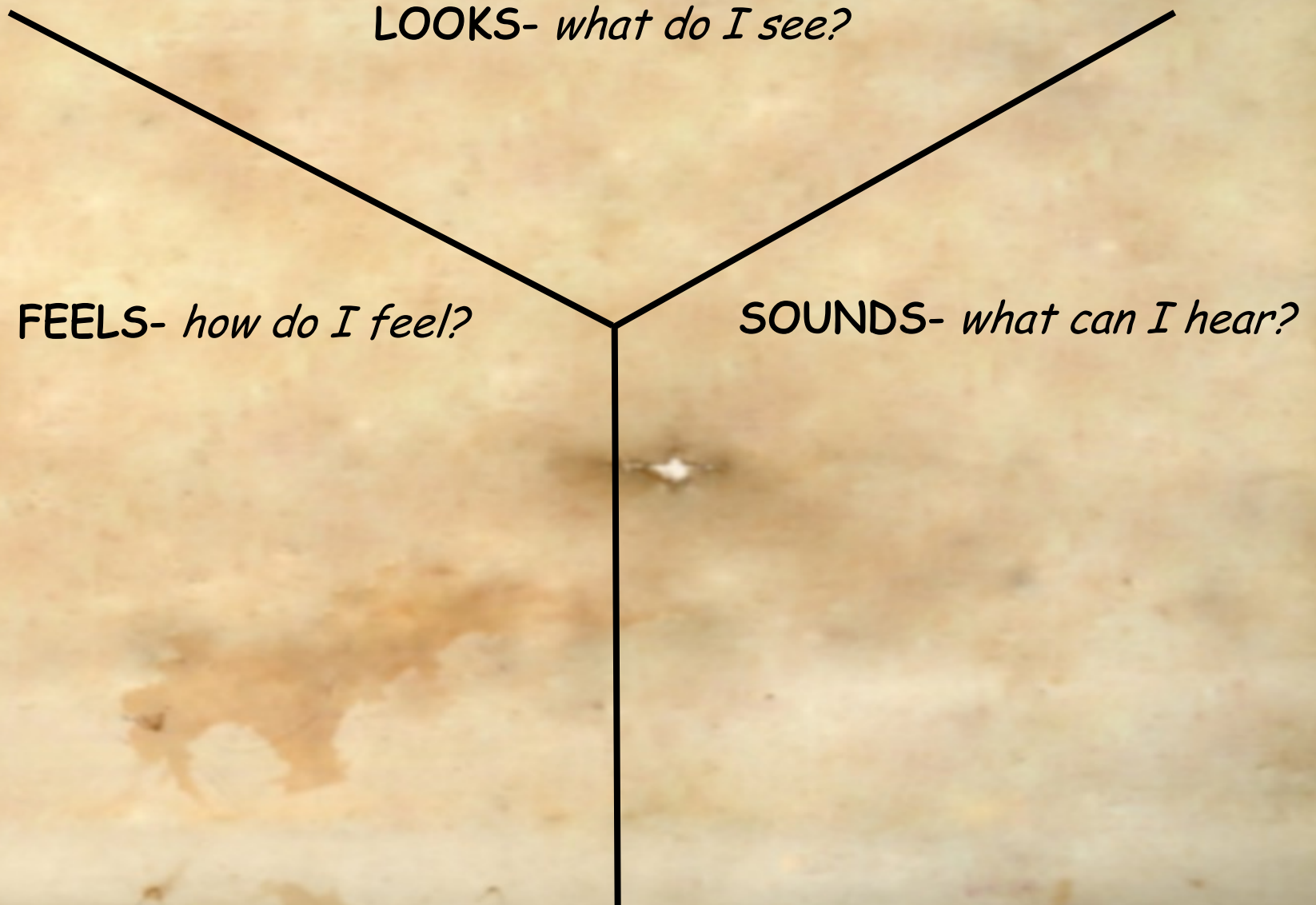
Investigating Biomes continued...

TASK:

- 1) Visit and choose <https://askabiologist.asu.edu/explore/Virtual-360-Biomes> to go on a virtual tour for one of the following;

- ☐ Desert- *South Western United States of America*
- ☐ Rainforest- *Panama*
- ☐ Temperate Forest- *Arizona and Colorado*

- 2) Draw and fill in a Y-chart in your Geography exercise book.



Sustainability

- ❖ Over time, humans have restructured biomes for agricultural, mining and urban function
- ❖ Modified biomes are called **anthropogenic biomes** or **anthromes**
 - This covers more of the Earth's surface than natural ecosystems!



The United Nations has stated that biomes need to be protected to meet the needs of the present, without comprising the ability of future generations to meet their own needs.

TASK:

- 1) What biome do you live in?
- 2) Using primary and secondary research, describe how your biome has been changed by anthropogenic forces.

Primary research examples: interview, questionnaire, etc.

Secondary research examples: books, websites, etc.