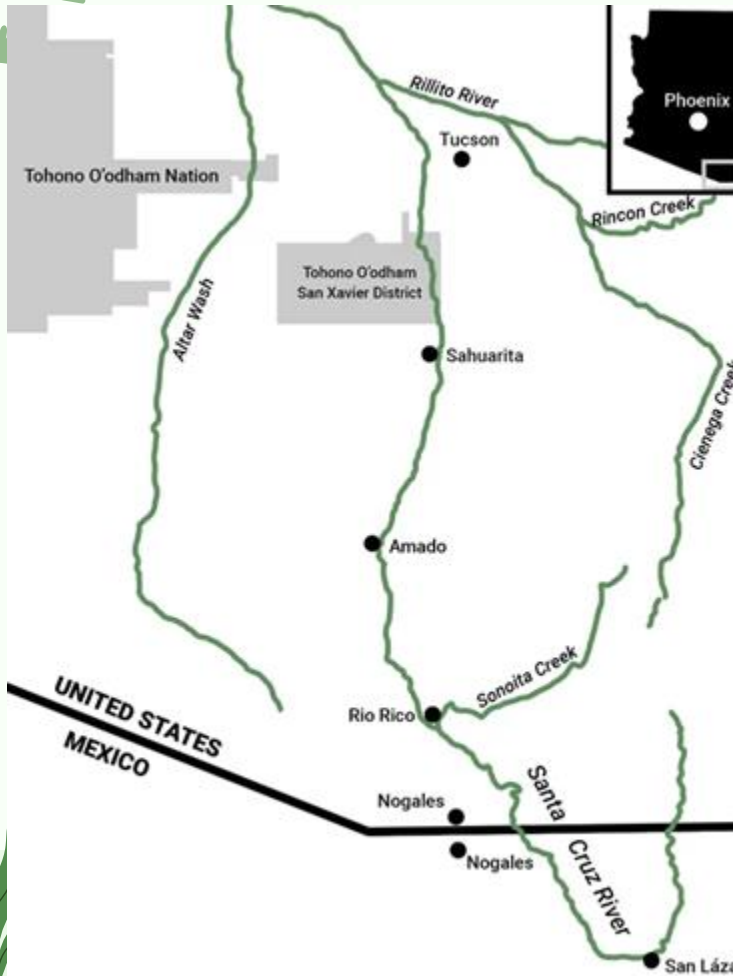
How do plants use their Resources?

BELLWORK:

Name a trait that a plant may have to improve its survival and how might it help it survive?

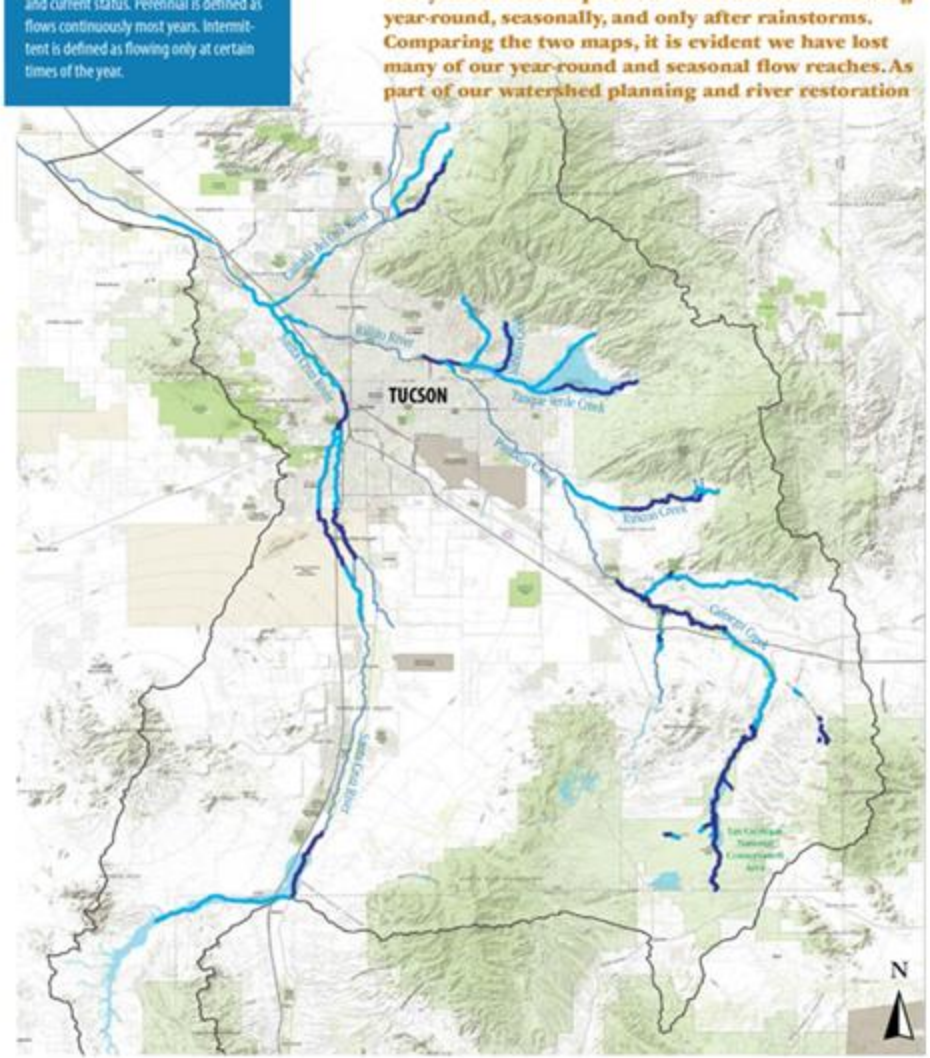
What are riparian or wetland plants?

Wetland areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year



and current status. Perennial is defined as flows continuously most years. Intermittent is defined as flowing only at certain times of the year.

year-round, seasonally, and only after rainstorms. Comparing the two maps, it is evident we have lost many of our year-round and seasonal flow reaches. As part of our watershed planning and river restoration



Why do leaves have different sizes?

Leaves come in different sizes and shapes.

Do you think having bigger leaf size is an advantage?

Which plants will need bigger leaves? The ones in riparian areas or in the desert?

As a team, collect 2 different leaves from the front of the room. Those are collected from a riparian area: Santa Cruz River.

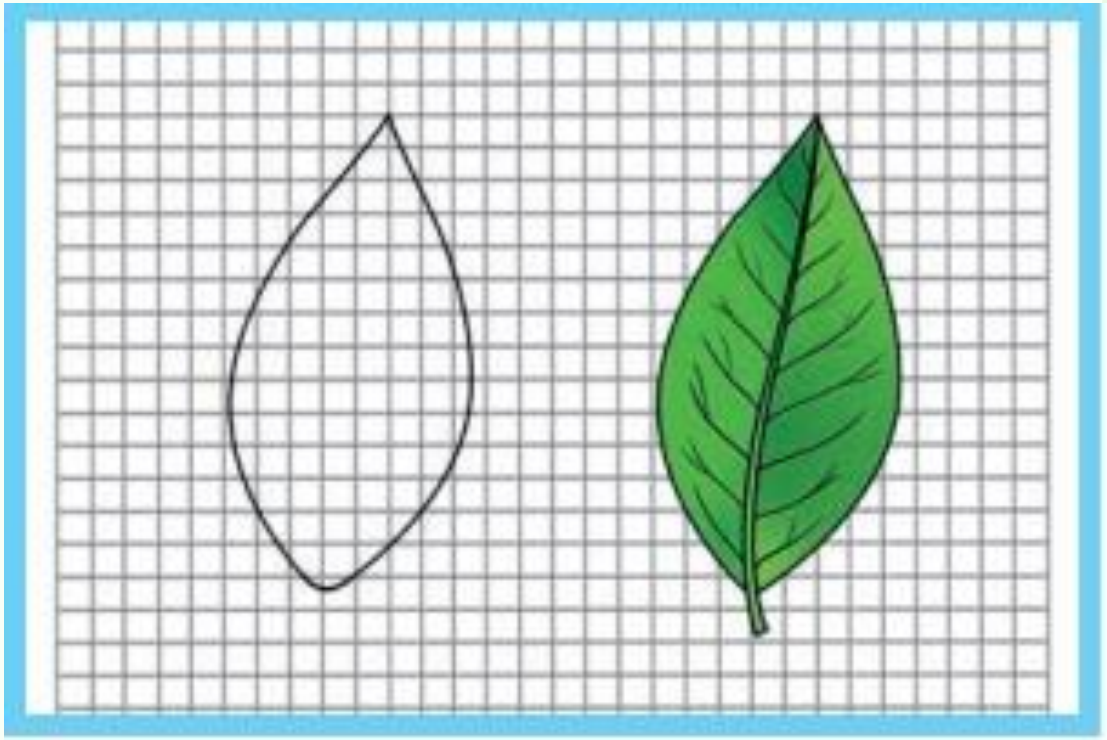
Collect the other materials:

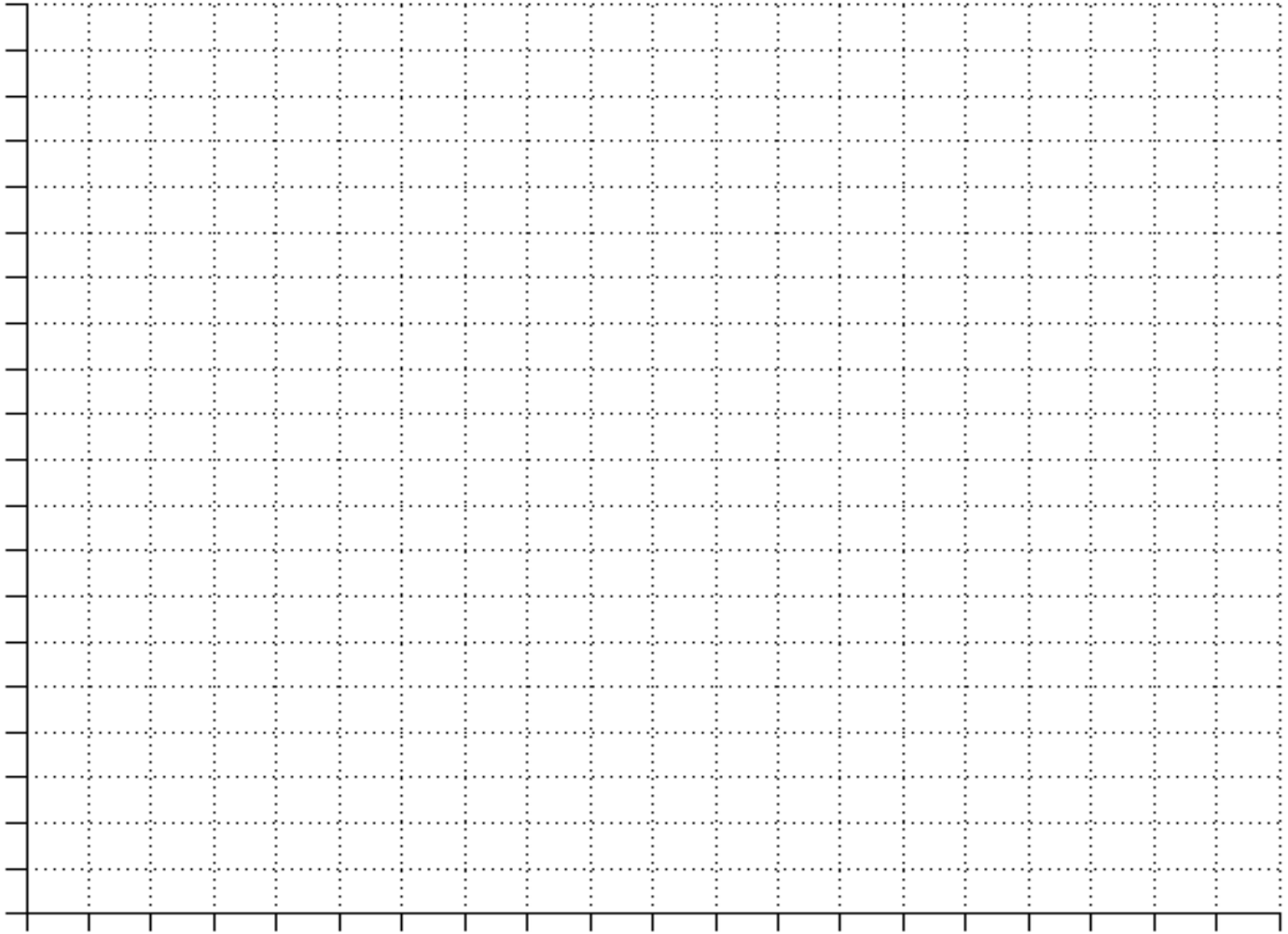
- Graph paper
- Ruler
- 2 small envelopes

How to calculate area

Use your grid paper to trace your leaf.
Area=length x width.

It’s mostly going to be an estimate because we can’t calculate exact measurement.





After calculating the leaf area and massing the leaf. Follow these steps:

#1 Place leaf inside envelope.

#2 Label your envelope with the plant name and your groups name.

#3 Do the same with the other leaf.

#4 Give to teacher to place outside to dry in the sun.

Bellwork:

Do you think desert plants should have bigger leaves or smaller leaves?

What type of resources do desert plants need the most?

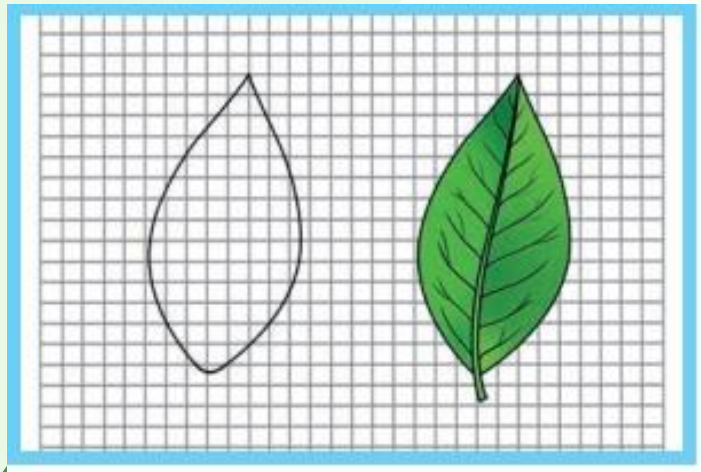
Day 2:

We will be collecting desert leaves from outside.

Make sure when you collect, they are complete leaves.

Pick 2 different plants.

Calculate leaf Area



Use your grid paper to trace your leaf.
Area=length x width.

It’s mostly going to be an estimate because we can’t calculate exact measurement.

After calculating the leaf area and massing the leaf. Follow these steps:

#1 Place leaf inside envelope.

#2 Label your envelope with the plant name and your groups name.

#3 Do the same with the other leaf.

#4 Give to teacher to place outside to dry in the sun.

Massing dry leaves

- With your team, grab your envelopes that have been dried out.
- CAREFULLY mass each leaf (they could be in crumbs!)
- Write down the measurement on your student sheet for each leaf.

Conclusion: Answer the questions on your sheet.

1. What does your graph tell us?
2. Which type of resources do plants need to survive?
3. Which types of plants are using their resources and which are conserving their resources? How do you know? (use the tables as evidence)
4. Why do some plants have a bigger leaf area than others?
5. If we were looking at the height of the plant, which type of plants would have less height and why? What about more height?