

AMAZING

ARUGULA



ALL ABOUT ARUGULA

Arugula grows well in the Mediterranean climate. It is cold tolerant and grows quickly, which makes it easy to garden. It also goes by the name “rocket” in the U.K. and “ruchetta” in Italy.

QUESTIONS TO CONSIDER:

What is a climate?

What are the qualities of the Mediterranean climate? For example, is it close by or far from water? Is it far North, far South, or in the middle?

What kind of climate do we have in Los Angeles?

What does it mean to be “cold tolerant?” Are you cold tolerant?

ACTIVITIES:

- Use the map to color the Mediterranean Sea [Blue](#). Draw a circle around any area you think has a Mediterranean climate
- Nature often creates perfect symmetry. Arugula leaves grow in a symmetrical pattern. Complete the symmetry on the following pages.

ALL ABOUT ARUGULA

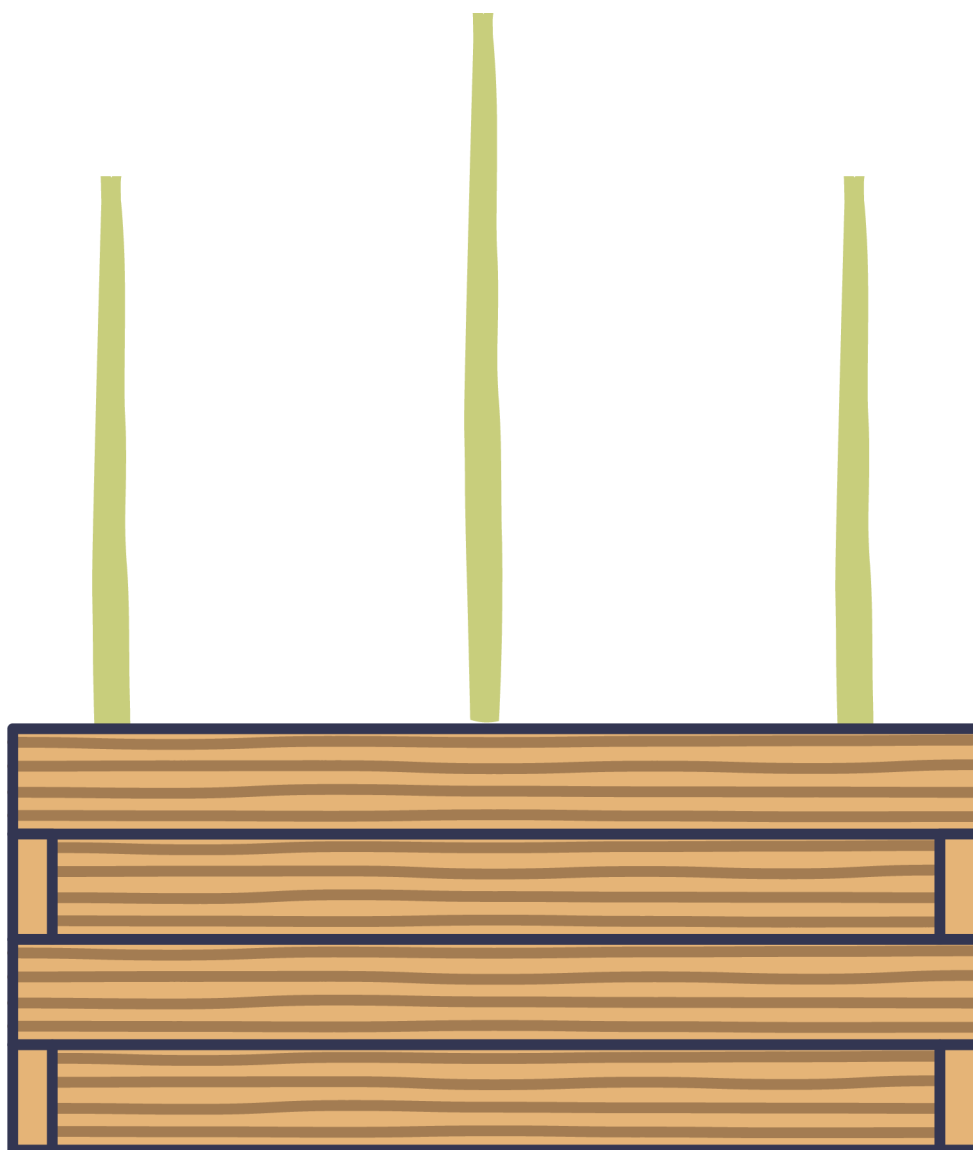
Use the map below to color the Mediterranean Sea **Blue**

Draw a circle around any area you think has a Mediterranean climate



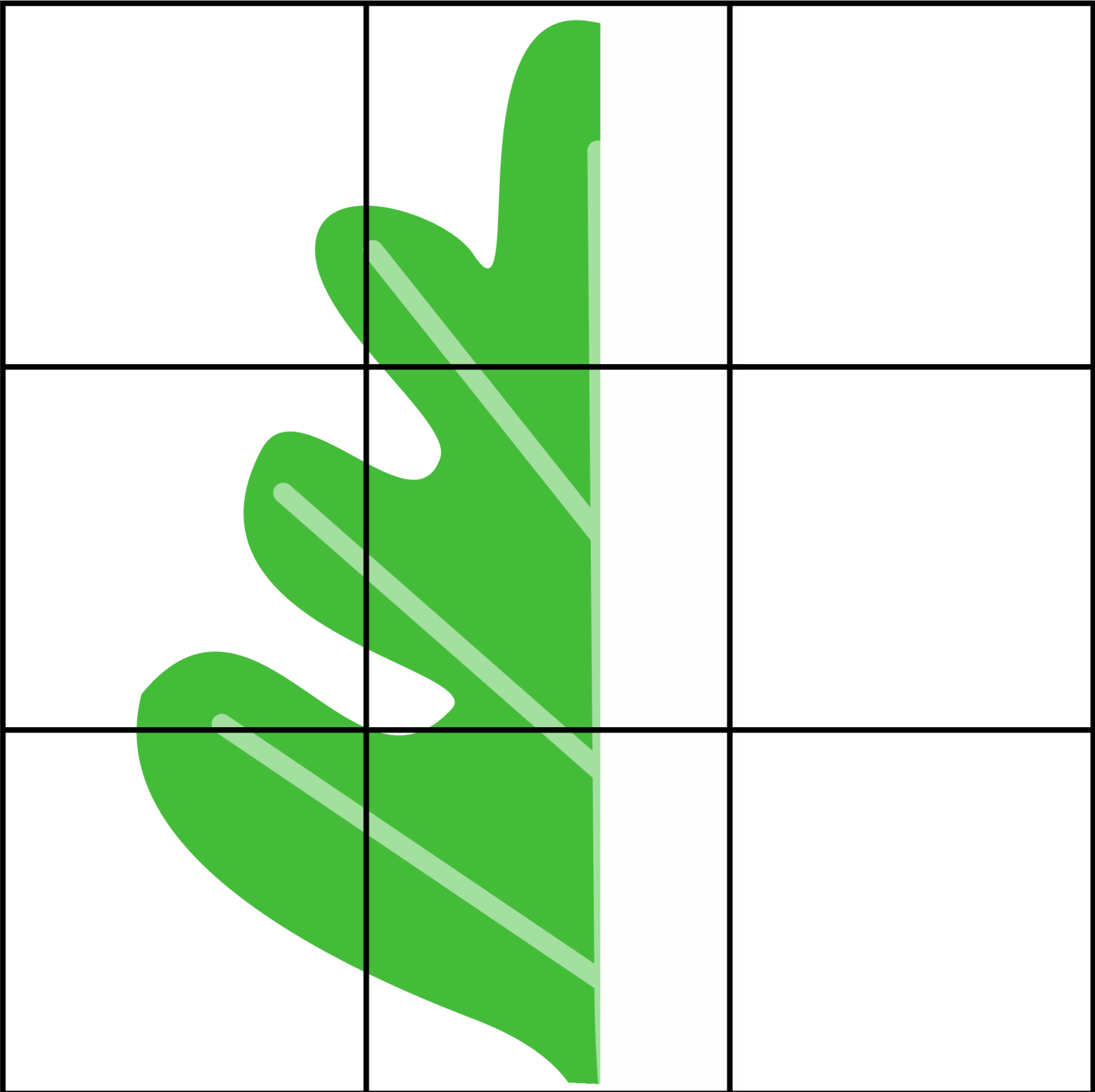
ALL ABOUT ARUGULA

Add leaves to the arugula stems, making each leaf symmetrical.



ALL ABOUT ARUGULA

Use the grid to complete the other half of the arugula leaf, making it symmetrical.



GROW ARUGULA

STEPS:

- Plant small seeds directly in well-drained, fertile soil
- Use a sunny location
- Plant seeds close to the surface, lightly covering them with soil
- Keep the soil moist
- Harvest the outer leaves when they are the size you want
- Thrives in Spring and Fall
- It can "bolt" - flower and become bitter - if it gets too hot

Questions to consider:

What makes fertile soil?

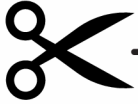
What does it mean for a plant to **thrive**? Do you have a season when you thrive?

How can you tell when a plant has **bolted**? Why do you think plants bolt?

Activity:

Using the template on the next page, make your own seed packet with instructions to grow arugula.





how much sun?



depth



season



water



VARIETAL



FROM THE GARDEN OF



EAT ARUGULA

We experience 5 different tastes when we eat: salty, sweet, sour, bitter, and umami (Earthy). Arugula is bitter, and it gets more bitter and peppery the longer it is left in the ground. You can enjoy arugula **raw** as part of a salad or on top of pizza. You can also dry arugula to use it as a spice.

QUESTIONS TO CONSIDER:

Why would a plant taste bitter?

Do you like bitter food? Can you think of other examples of bitter food?

How can you make a food taste less bitter?

How can you make a food taste less peppery or spicy?

ACTIVITIES:

Make arugula pesto

Make whipped feta

Draw a circle around any area you think has a Mediterranean climate

ARUGULA PESTO

INGREDIENTS:

- 2 cups packed arugula
- 1/2 cup shelled walnuts (they're great for your brain)
- 1/2 cup fresh Parmesan cheese (a dairy product balances bitter flavors)
- 1/2 cup extra virgin olive oil (healthy fats balance your energy)
- 1/2 clove garlic, peeled (this makes the taste more complex)
- 1/2 teaspoon salt (this brings out all the other flavors)

STEPS:

- Wash your arugula and remove the stems (the stems are tough and extra bitter)
- (Optional) Add your garlic clove to a mortar and smush it lightly with a pestle. This adds a garlic flavor to the serving dish itself.
- Add all the ingredients to a food processor
- Blend until it is a consistent color and texture
- Transfer the pesto back to your mortar for serving

WHIPPED FETA

INGREDIENTS:

- 8 oz feta cheese (this has a sharp smell & taste)
- 8 oz cream cheese (this is creamy to add texture)
- 2 tablespoons honey (the sweet taste balances the salty sharp of the feta)

STEPS:

- Add the ingredients to a food processor or blender and blend until fluffy
- Adjust this recipe as you like. Add more honey, top with nuts, or mix in something spicy.

RECOMMENDATION:

- Serve with the pesto, fresh arugula, herbs, bread or crackers, veggies for dipping. Make your own recipes from the items on the tasting board.

RECIPE:

DIFFICULTY:



TIME:



INGREDIENTS:

● _____	● _____
● _____	● _____
● _____	● _____
● _____	

INSTRUCTION:



MAKE WITH ARUGULA

How is paint made? Today, many paints are made in factories using chemicals. But, all paint colors once came from plants and nature. Let's take a look at how to make paint using arugula!

Here are some words we can learn:

- **Pigment:** This is the base we use to color our paint. We need to make pigment from arugula first. Our arugula paint will be greenish brown.
- **Binder:** This is what we add to pigment to turn it into paint, such as watercolor paint or a tempera paint.
- **Fugitive or color fast:** Fugitive means "quick to fade." Pigments made from plants are more fugitive than those made in factories, which tend to be more color fast.
- **Fermentation:** Fermenting a plant first can make the color less fugitive.

ACTIVITIES:

- Ferment arugula
- Follow the steps to make arugula paint
- Paint an apron

FERMENT ARUGULA

Fermentation is a natural process where something is broken down by bacteria. Bacteria can be added to something to help it ferment, or bacteria will form on its own in the right conditions. Let's create those conditions!

Ingredients:

- Approximately 2 cups of arugula
- Water heated to approximately 100 degrees
- Salt
- An air tight container
- A kitchen scale

STEPS:

- Pick your arugula and rinse off soil / bugs
- Pour your water into a bowl or container until it reaches 16g (this should be approximately 2 cups)
- Add salt in a ratio of 2% of the total solution. You will need to find 2% of 16g for this step. Find a helper if you have questions!
- Mix the salt into the warm water and mix lightly. Stop and observe what you see.
- Pack your arugula into your air tight container.
- Pour your water and salt mixture slowly over your arugula until the leaves are fully submerged. If you need more, you can mix up another batch using the same ratios.
- Store in a cool, dark place for approximately 3 days.

FOLLOW UP QUESTIONS:

- Did we create a solution or a suspension?
- Can you think of any food you eat that is fermented?
- How do we know if fermentation is working? When is it time to stop fermenting and make the pigment?

MAKE ARUGULA PAINT

Fermenting the arugula is optional, but it will help make your paint less fugitive. You can start with either fresh or fermented leafy greens.

Ingredients:

- Leafy green such as arugula, fermented is ideal
- Water
- Pot
- Sieve
- Paint binder (Buy some at the craft store, or make some using kitchen products. Common options are egg yolks, corn starch, glycerin, and gum powder. Have fun trying! We used corn starch and agar agar for the best results we could get.)

STEPS:

- Put your arugula in a pot and cover it with water. The more water you use, the more paint you will have in the end, but the less **saturated** (colorful) it will be.
- Boil your arugula until the water has a greenish hue and the plant itself is a dark green and about 1/4 of its original size.
- Strain the water into a fresh bowl.
- Use a wooden spoon to press the arugula against the sieve (or use cheesecloth) to get all of the pigment out.
- Mix the pigment with your binder, and voila!
- Store your paint in an air tight container in the fridge. Use immediately for best color results.

FOLLOW UP QUESTIONS:

- What happens if you boil the water even longer?
- What chemical compound is in the leafy green that is making the pigment green?