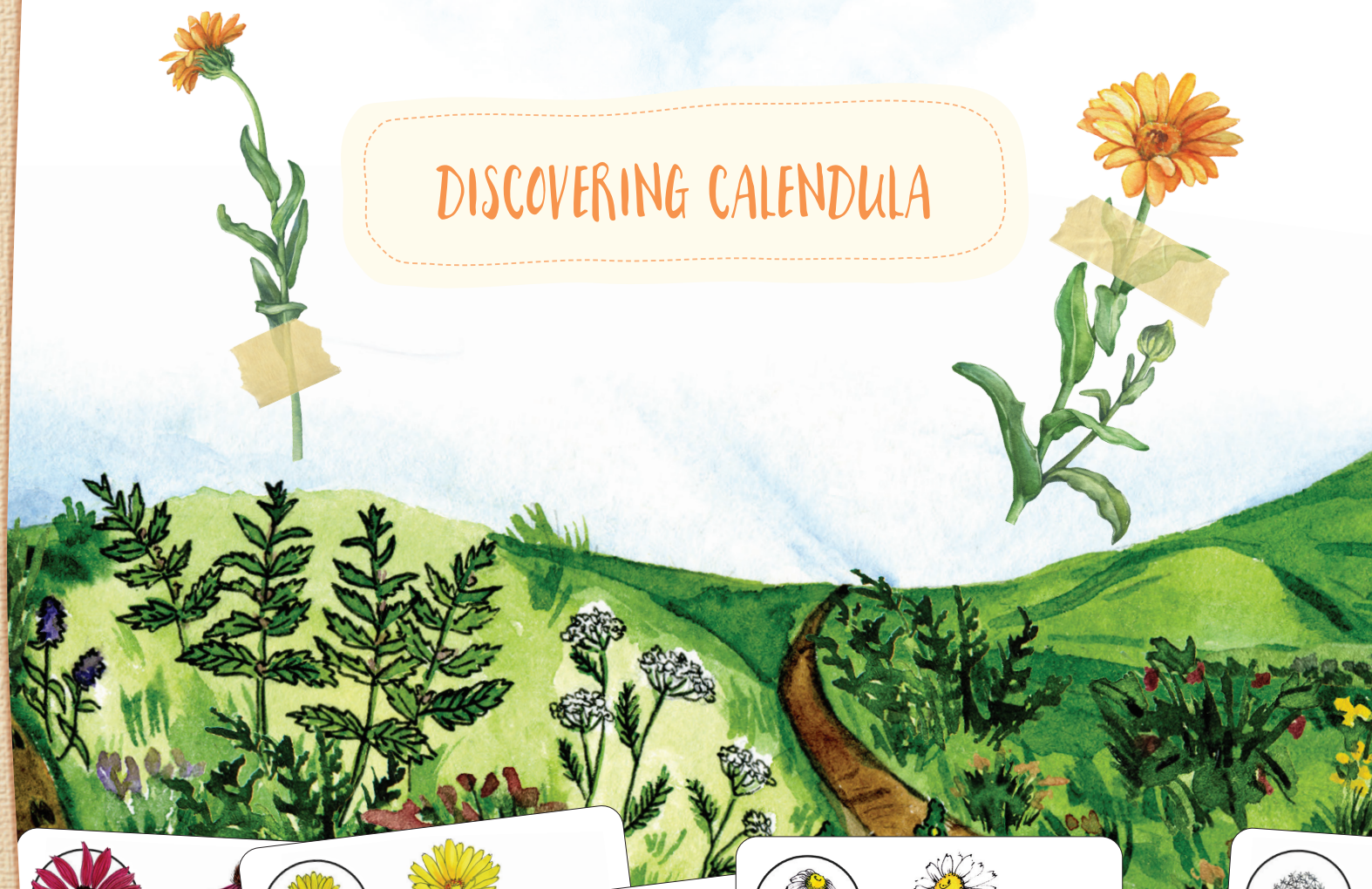


Herb Fairies

Activity Book

DISCOVERING CALENDULA



Echinacea
Echinacea purpurea



Calendula
Calendula officinalis



Chamomile
Anthemis nobilis





Calendula

Botanical name: *Calendula officinalis*

Family: Asteraceae



Gifts: drying, helps reduce inflammation, nourishing for liver and lymphatic system, prevents infection, relaxes muscles, slightly moistening, supports immune system, warming, wound healing

Parts Used:
flower

Fill in the identifying characteristics of calendula.

(1)

(2)

(3)

(4)

How the plant is used:

- **Oil:** sunburns, earaches (drops in the ear)
- **Poultice:** mosquito bites; bee, wasp or hornet stings; scraped knees; cuts; burns; sprained ankles; bumps and bruises; nettle stings; blisters; poison ivy; rashes; toothaches; sore muscles
- **Salve:** mosquito bites; bee, wasp or hornet stings; scraped knees; cuts; bumps and bruises; blisters; rashes
- **Soak:** sprained ankles, burns
- **Tea:** diarrhea
- **Tincture:** toothaches
- **Vinegar:** sunburns
- **Wash:** burns, itchy eyes, poison ivy

Places you've found calendula:

In what season?

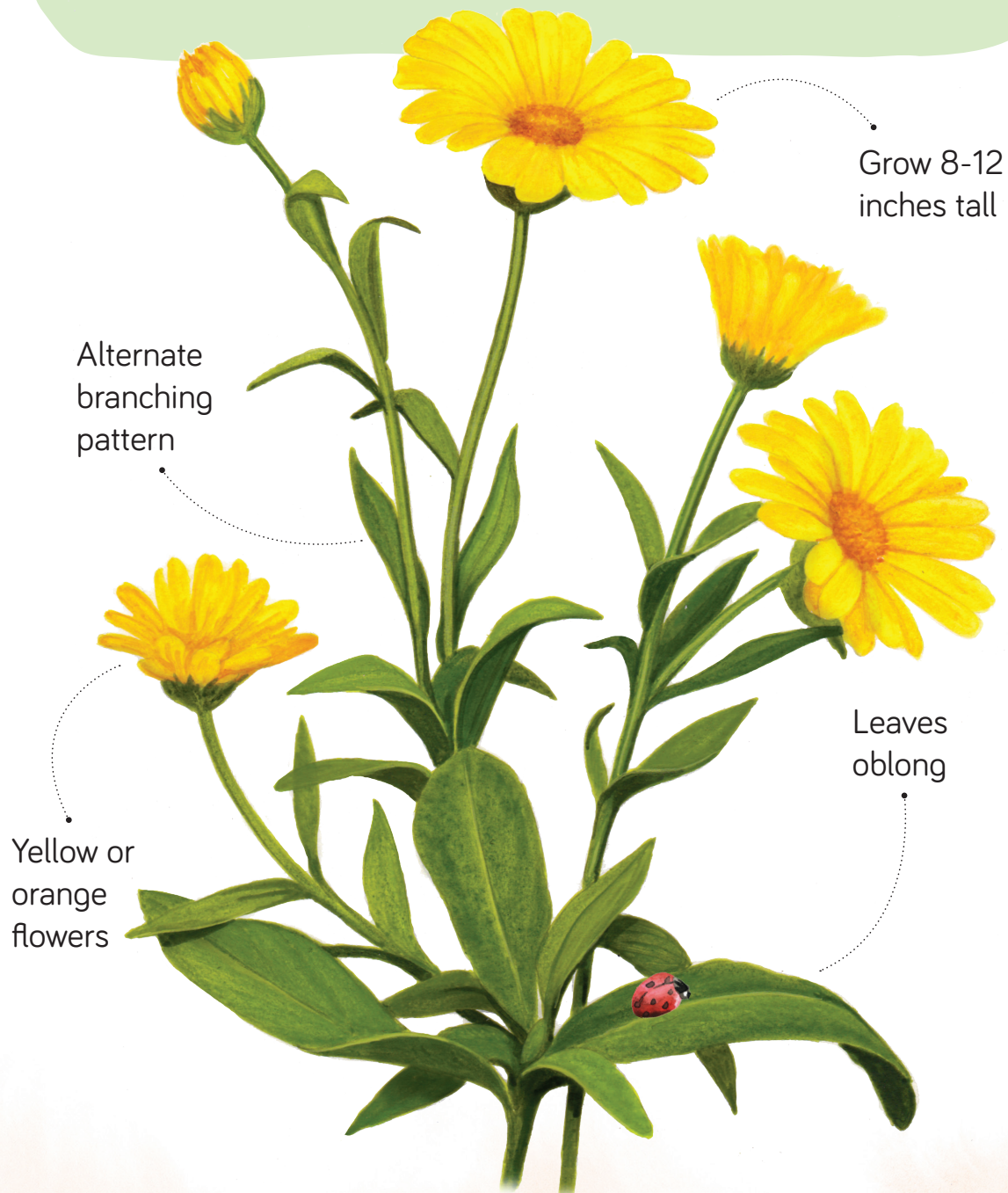
Calendula

Botanical name: *Calendula officinalis*

Family: Asteraceae

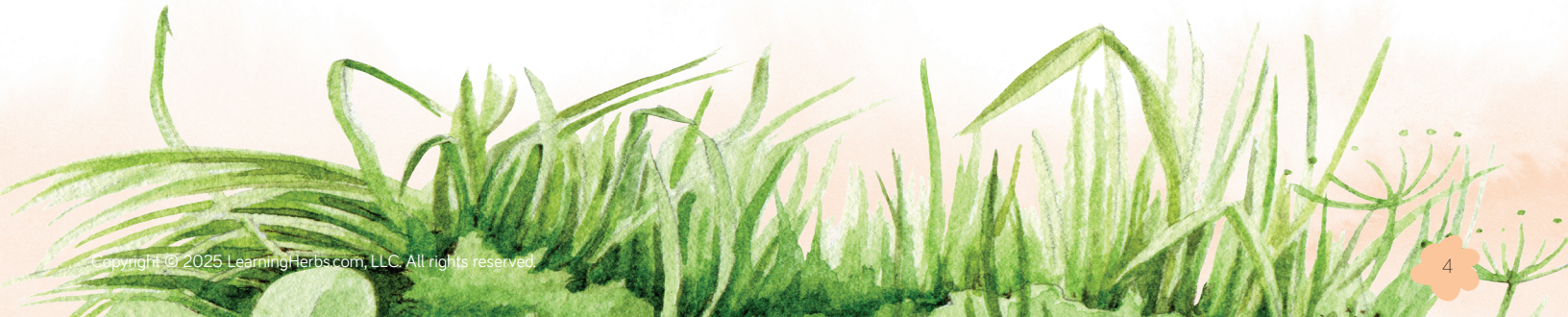
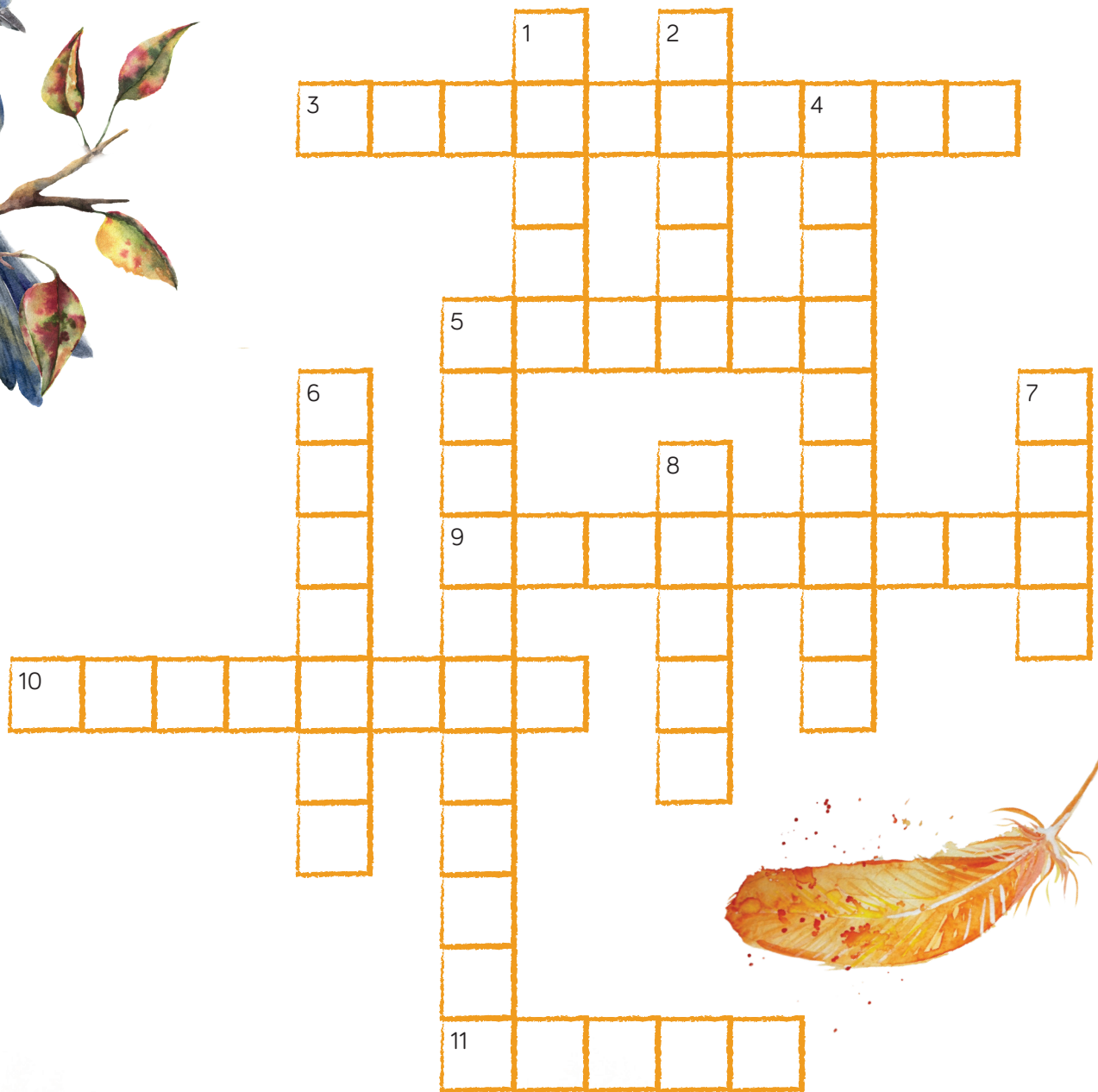
Gifts

drying, helps reduce inflammation, nourishing for liver and lymphatic system, prevents infection, relaxes muscles, slightly moistening, supports immune system, warming, wound healing





Let's complete the crossword puzzle!
The clues are on the next page.



Psst: Parents, younger sleuths might like it if you make a word bank for them using the upside-down answers at the bottom of the page.



Across

- 3) Calendula's slightly _____ quality makes it soothing for itchy eyes and poison ivy.
- 5) Calendula flowers can be yellow or _____.
- 9) When making flower _____ you steep the flowers in water for an hour.
- 10) Calendula is good at killing _____, which can help cuts heal without getting infected.
- 11) In order to make a strong herbal tea or infusion you must let the leaves and flowers _____ in boiled water.



Down

- 1) Calendula is in the _____ family.
- 2) Our fingers feel sticky when we pick calendula flowers because of the _____ in the flowers.
- 4) Calendula can help draw an _____ out of a wound.
- 5) The scientific species name for calendula is _____.
- 6) Like all aster family plants, calendula has disc and ray _____.
- 7) You can make a calendula _____ to help heal a sunburn.
- 8) The stalks of the calendula plant are _____.



Across: (3) moistening (5) orange (9) infusions (10) bacteria (11) steep
Down: (1) aster (2) resin (4) infection (5) officinalis (6) flowers (7) wash (8) fuzzy



Calendula Chocolate Chip Raspberry Muffins

Herbalists often use calendula as a medicinal herb, but it is also a wonderful flower to add to our food. Those dark-colored petals are high in flavonoids that can protect heart health. They are also colorful, adding a splash of fun to our food.

- 2 cups of flour
- 1 tablespoon cinnamon
- 1 tsp baking soda
- ½ cup butter (softened)
- ½ cup honey
- 1 egg
- 1 cup applesauce
- 1 tablespoon vanilla extract
- handful of calendula petals
- pint of raspberries
- ½ cup of chocolate chips

1. To begin, combine the dry ingredients in a bowl and then set aside.
 2. Mix the softened butter with the honey and once well-combined stir in the egg, applesauce and vanilla.
 3. Combine the wet and dry ingredients. Add the calendula flowers and chocolate chips and stir well.
 4. Gently stir in the raspberries and then spoon the batter into a muffin tin. (Fill each muffin tin about $\frac{3}{4}$ of the way full.)
 5. Bake at 350 degrees for 20–25 minutes.
- 





Calendula Petal Handmade Paper

If flower petals are nature's confetti, then calendula petals are like little rays of sunshine that fell to the ground. Let's help Cally, the calendula fairy, make some sunny paper to chase away the winter gloom! You can use your handmade paper to make a card for your grandma or teacher, bind a few sheets into a fun sketchbook, or turn it into a colourful holiday garland. The possibilities are endless!

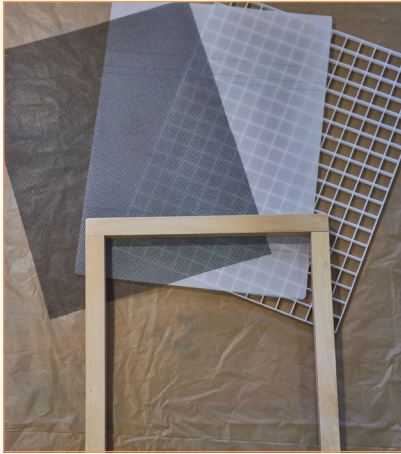
- Paper scraps, cut, torn, or shredded (see notes), or ready-made paper pulp
- Calendula petals
- Blender, or in a pinch, an empty plastic water bottle (not ideal, but it works!)
- Basin, deep tray, or large plastic container, which will be your paper-making vat
- Picture frame to use as a deckle (it should fit easily into your vat when tilted diagonally)
- Cookie tray, large cutting board, or any flat, sturdy surface
- Plastic mesh canvas sheet (4–7 count), about the same size as your frame, which will be your support grid
- Wire mesh (60–120 count; stainless steel, aluminum, or plastic), about the size of your frame, which will be your paper-making

screen; *tip: a window screen can work in a pinch, but its holes are a bit too big*

- Window screen, about the same size, which will be your cover screen
- Two dish towels or other absorbent cloths
- A heavy book wrapped in a plastic bag, called a press bar, for pressing paper flat
- Sponge
- Iron (optional)
- Extra flower petals (optional)

Note: Mesh is measured by hole count. The bigger the count, the smaller the holes.





A Note About Paper

You can use almost any kind of paper, but some types break down better than others and make smoother results.

- **Printer paper** can be tough to blend (and let's be honest, it's kind of boring!).
- **Construction paper** turns pulpy fast and makes thick, chunky sheets, but its bright colours can fade when dry.
- **Toilet paper** or **paper towels** make thin, smooth paper with a nice texture. You can jazz it up with glitter, colourful bits of torn paper, or flower petals.
- You can also experiment with **newspapers**, **old sketchbooks**, or **magazines**, each kind gives a different look and feel.

Every mix makes something new, so have fun experimenting until you find your favourite paper recipe!

Other Flowers to Try

You don't have to stick to calendula, lots of flowers make beautiful paper! Try cornflower, cosmos, lavender, small roses, bee balm, daisies, or marigolds.

Paper-Making Vocabulary

Paper-making vat: a container where you mix paper pulp and water.

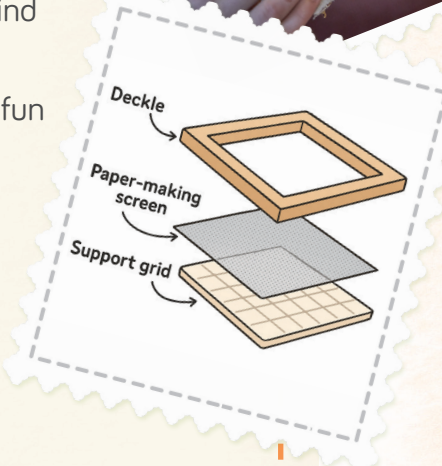
Deckle: the frame that shapes the paper while you scoop the pulp.

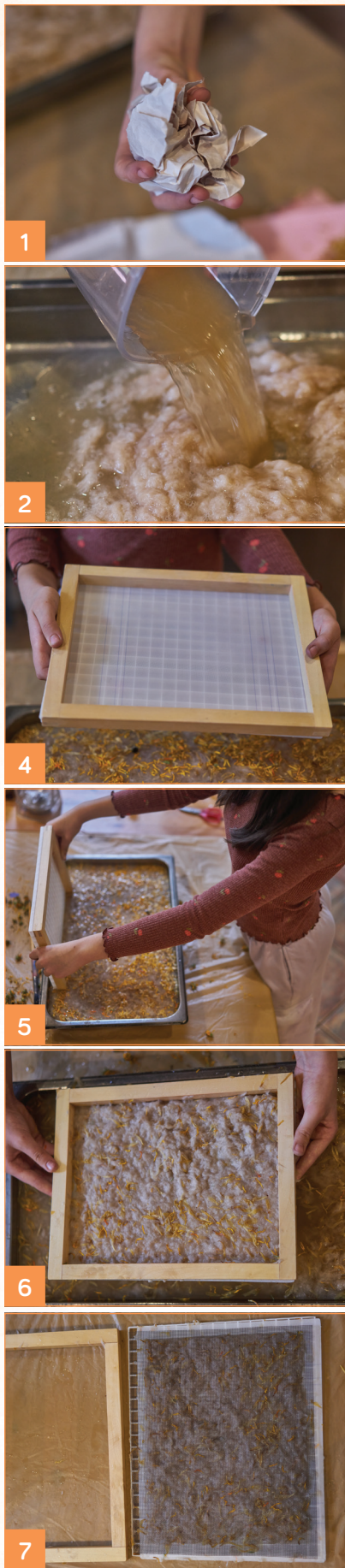
Support grid: the largest mesh, which holds the paper-making screen in place.

Paper-making screen: a very fine mesh with very, very small holes that let water drain from the paper pulp.

Cover screen: a medium-mesh screen placed on top of the paper to help press it flat and smooth.

Press bar: a heavy object used to press the paper flat.





1. Put about a fist-sized amount of paper into the blender with a quart of water. Blend for about 40 seconds, then pour it into the vat. You just made pulp!

Note: if you don't have a blender, you can try breaking down your paper by adding small amounts to a plastic bottle, soaking it for a bit, and shaking it really hard. It won't work quite as well as a blender, but it will still do the trick, especially if you use softer paper like toilet paper. Plus, it's a great workout!

2. Repeat step 1 until your pulp and water mixture is at least 2 inches deep in the vat. More is okay. Each fist-sized batch of paper should come with a quart of water. Add calendula petals to the vat.
3. Assemble your mold: place the plastic mesh canvas sheet (the support grid) on the bottom, put the wire mesh sheet (the paper-making screen) on top, and then place the picture frame (the deckle) on top of that. Your mold should now look like a little "sandwich": support grid on the bottom, paper-making screen in the middle, and deckle frame on top.
4. Pick up your mold with both hands, holding it on the short sides with your thumbs on top (but not covering the screen) and fingers underneath the grid.
5. Lower the mold into the vat, dipping the far side in first. Then slowly slide the lower edge toward you until the whole frame is underwater.
6. Once the pulp floats evenly over the mold, carefully lift it straight up and out of the vat, keeping it level. Hold it to drain. When most of the water has dripped out, tilt it a little to let out even more.
7. Set the mold on your prepared surface (a cookie tray or cutting board). Lift off the frame (deckle) and set it aside. Place a piece of window screen (the cover screen) on top of the paper. Now you have another sandwich: support grid on the bottom, paper-making screen and paper in the middle, and cover screen on top.



8



9



9



10



11



12

8. Gently press the sponge over the whole screen, wringing out the sponge often so it can keep soaking up more water.
9. Carefully peel off the cover screen. Now get your absorbent cloth ready. Pick up the paper-making screen with your new sheet of paper still on it, lift it off the support grid, and turn it over onto the cloth so the paper faces down and the paper-making screen is on top. Your new sandwich is cloth on the bottom, paper in the middle, and paper-making screen on top.
10. Press firmly with the sponge all over the paper-making screen to remove as much water as possible. Repeat two or three times, or more, until you think there's no water left. Then press one more time, just to be sure.
11. Carefully lift a corner of the paper-making screen. Your new sheet of paper should stay on the cloth.
12. Place a second cloth on top. Now your sandwich looks like this: cloth, paper, cloth. Use a heavy book wrapped in a plastic bag to press firmly over the whole sheet to squeeze out a bit more water.
13. Ask for help from an adult. Move your paper sandwich to an ironing board. Set the iron to high heat with no steam and iron until you no longer hear a "sh-sh" sound and the steam is gone. Remove the top cloth and iron the paper directly a little more.

Alternative: you can let your paper dry naturally by removing the top cloth and leaving it out to dry, but it may curl at the corners and will take longer.

14. Once dry, place the paper under a heavy book for a final pressing. Your paper is ready!



12



13



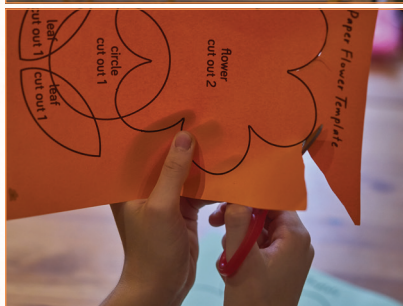
Bonus Craft: Seed Paper Flower

Give a gift of flowers to your friends and loved ones! The center of this flower has a secret: tiny sleeping seeds that will wake up in spring with a little soil, water, and love. Plant it just under a thin layer of soil, give it a drink, and watch the magic happen.



- Handmade paper
- Popsicle stick
- Liquid glue
- Colourful construction paper (green for leaves, plus any other colours you like)
- Small seeds (see note)





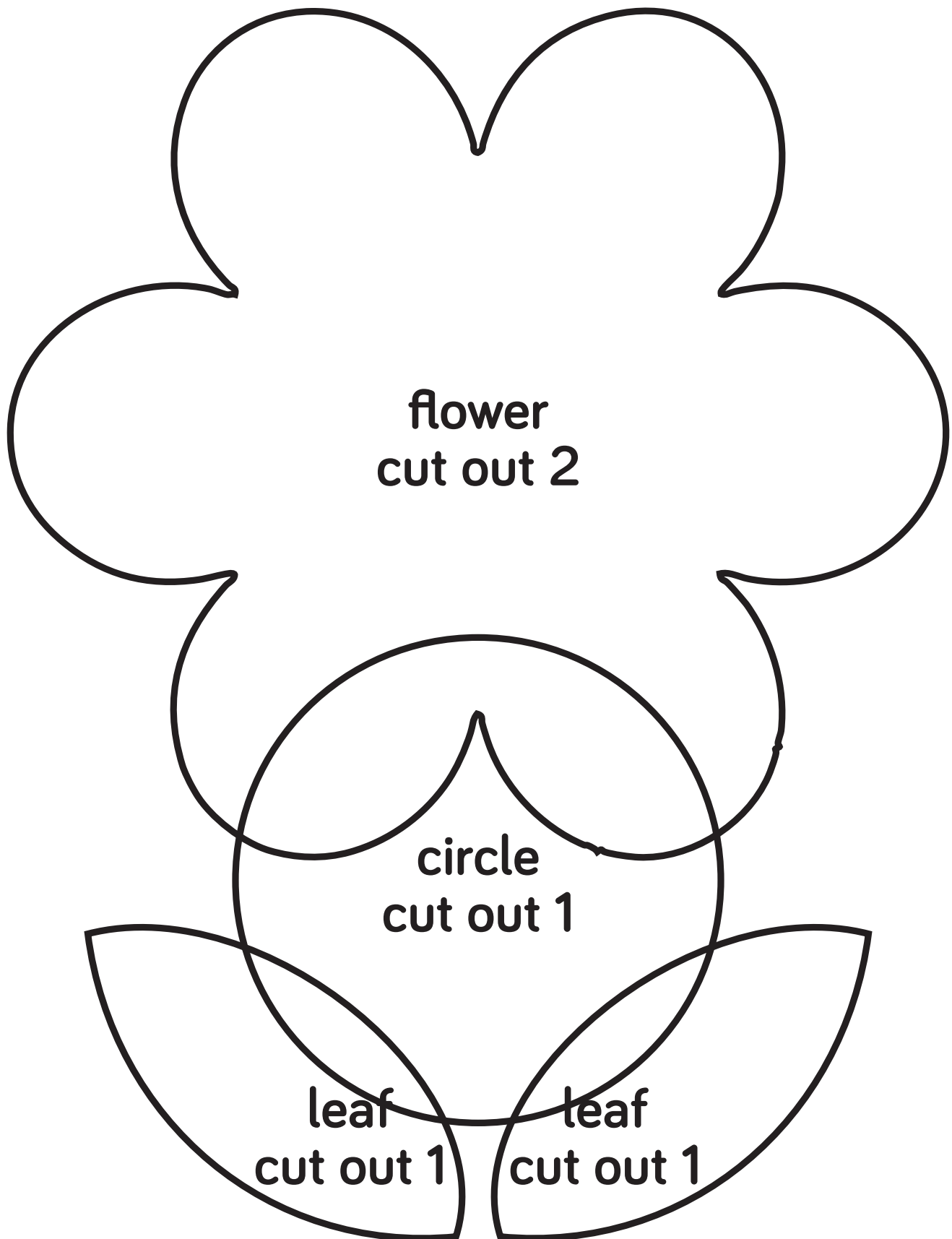
1. Sprinkle small seeds into the vat along the petals of your choice. You can use random petals for a fun, colorful look, or choose petals that give a hint of what will grow in spring. Then continue with the regular paper-making steps.
2. Once your handmade paper is ready and completely dry (most likely the next day), use the template to cut out a circle, or as many as you need, one circle per flower.
3. Using the template, cut out two flower shapes from your favorite colorful paper. Cut out the leaves as well.
4. Use glue to attach an ice cream stick to one of the flower shapes. Glue the second flower on top so the ice cream stick stays sandwiched between the two flower shapes. Attach the two green leaves to the stick.
5. Glue your handmade paper circle in the middle to mimic the center of the flower, where the seeds grow.
6. Add a label with planting instructions for the person who will receive your flower. You can use your handmade paper for the label! Write simple steps, for example: fill a pot with soil, place the seed circle on top, cover it with a thin layer of soil, water gently, and watch the magic happen.
7. If you want to plant the flower yourself, fill a small pot almost to the top with potting soil. Tear the center circle from the flower and place it on top of the soil. Add a thin layer of soil over the seeds, water gently, and keep the soil moist until you see sprouts. Continue watering as they grow.

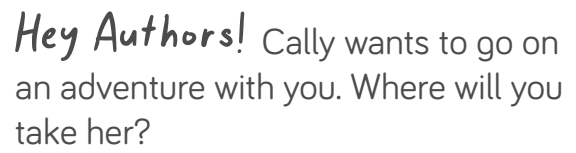
A Note About Seeds

Most calendula seeds are pretty big, so they might be tricky to tuck into your paper. However, calendula *resina* can have smaller seeds, so look for those or other smaller varieties. You can also use seeds from other flowers, like cornflower, cosmos, marigold, or pansies. Or go all herbal with yarrow, catnip, violets, or chamomile seeds, which are fun to sprinkle in too.



Paper Flower Template





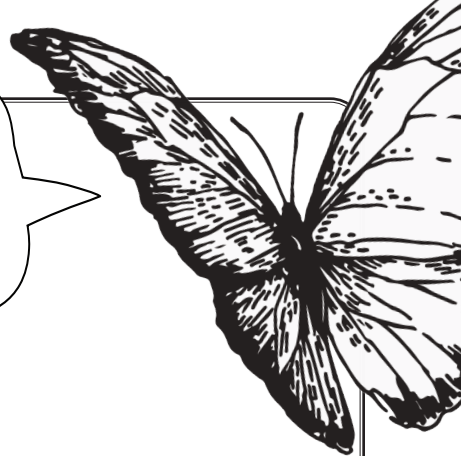
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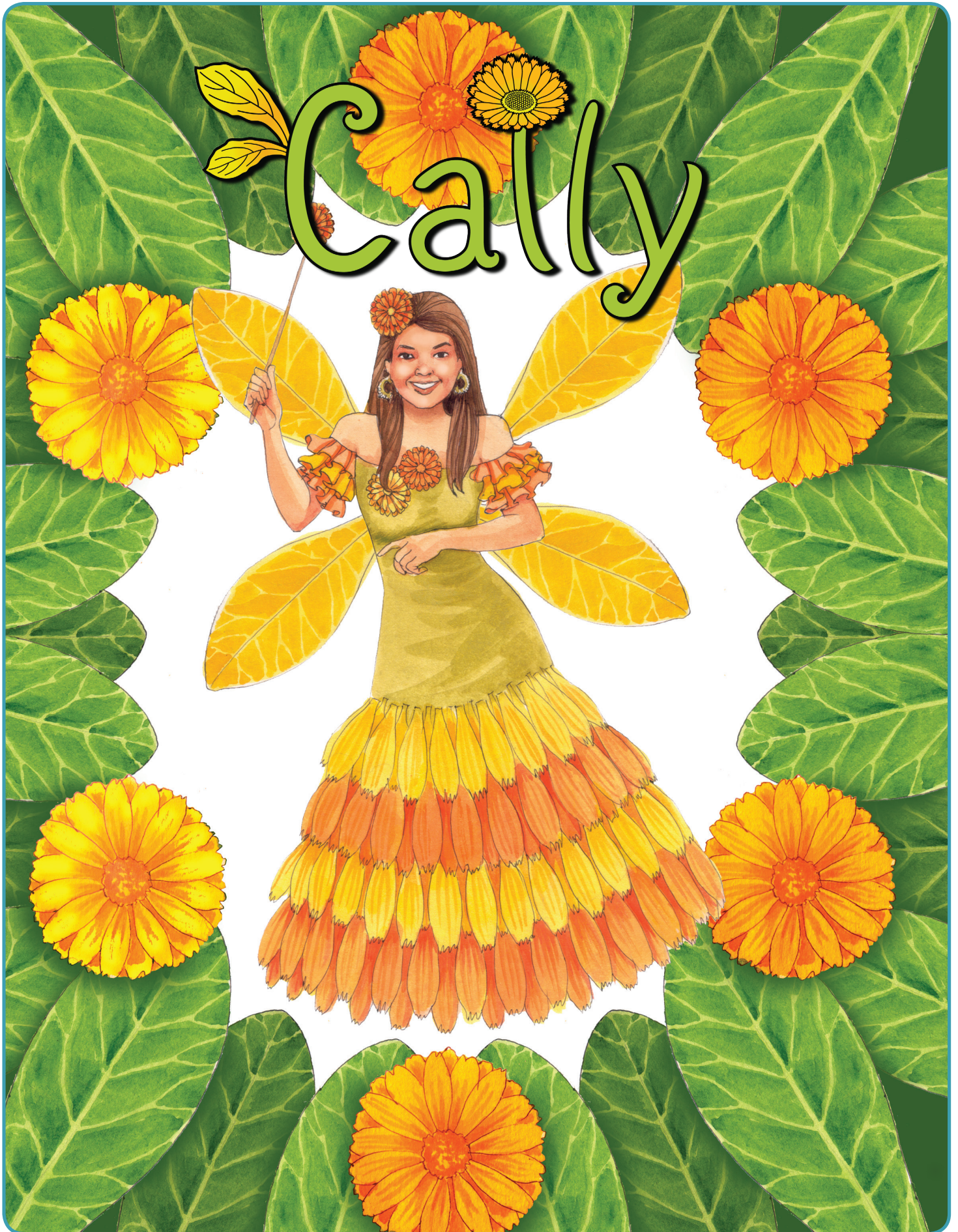
Common name:.....

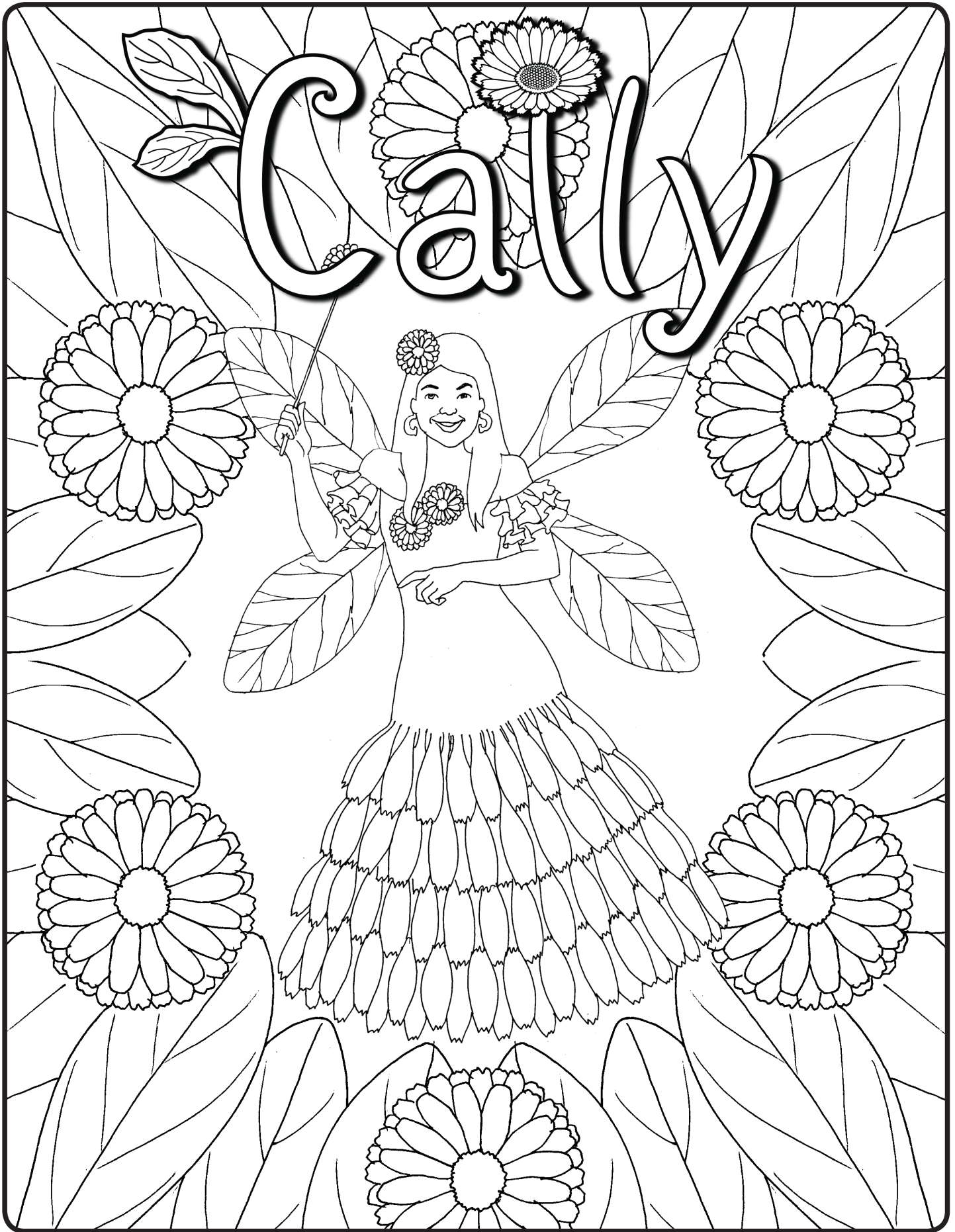
Botanical name:.....

Family:.....

Have fun coloring
this calendula plant
with sunny summer
colors.







Connect the dots to
give this calendula
flower its petals!

