A SPARKATLAS PACK FOR LITTLE NATURALISTS

Seed Travellers

Spinners, parachutes, hitchhikers and squirrel snacks: find out how seeds get from here to there.



INSIDE THIS PACK

02 Grown-up guide: one minute to read
03 Seed travellers: a hunt chart
04 Small to big, smooth to prickly
05 Whose seed is it?
06 Make a spinner and test it
07 How many seeds inside?

YOU'LL NEED

- a bag or box for your finds
- paper, scissors and a paper clip
- an apple and a pea or bean pod

TIME

About 10 to 15 minutes a page

Our seed walk

Date _____ Where we looked _____

Weather · Circle one

◯ sunny ◯ cloudy ◯ rainy ◯ windy

AGES Sprout 2–3 Seedling 3–5 Sapling 5–7

Each activity page shows its band.

WHY THIS MATTERS

Plants can't walk, so their seeds have to travel. Looking at a seed's shape and guessing how it moves is real scientific thinking: notice, wonder, test. It all starts with a pocket full of finds.

Before the Seed Hunt

A one-minute read for grown-ups.

How to use it (about 10 to 15 minutes a page)

1. **Go out first.**
   A short walk under a few trees turns up plenty of seeds. Bring a bag or a box.
2. **Let them lead.**
   Follow what your child picks up. One good find is worth more than a full chart.
3. **Ask, don't tell.**
   "How do you think this one travels?" Every guess is welcome; you can check together.
4. **Keep the finds.**
   A seed tray on the windowsill makes the later pages easy to come back to.

Three ways to play

Sprout 2–3

Spot and tick seeds, line up two or three finds, match one seed to its tree and feel smooth versus prickly.

Seedling 3–5

Hunt for the chart, line up five finds from small to big, guess before counting and test the spinner once.

Sapling 5–7

Sort finds by how they travel, run the drop test three times, write the numbers and invent a seed of their own.

Little notes

Seeds, nuts and berries can be a choking hazard: they're for looking, not eating, so watch toddlers closely. Never taste wild berries. Skip nuts if anyone has a nut allergy. A grown-up does all the cutting. Wash hands afterwards.

Printing tips

Page 1 is the cover. To save ink, print pages 2 to 7 only. Every page works in black and white, on Letter or A4. Print the spinner page at actual size (100%).

Wonder out loud together

- Why would a plant want its seeds to go far away?
- Which seed would win a race to the ground?
- How could a seed travel on water?
- If you were a seed, how would you travel?

FOR GROWN-UPS

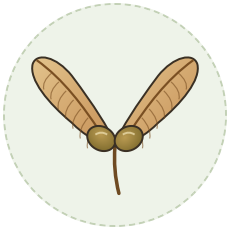
Children notice that some seeds are fluffy, sticky or tasty long before they know why. Linking a shape to a job (wings for wind, hooks for fur) is the start of thinking like a scientist.

Seed Travellers

Plants can't walk, so their seeds go on a journey.

Find a seed and tick it. Then read its tag: how does it travel?

Wind	Hooks	Animals	Pop!
fly, float or spin away	catch on fur, socks and coats	get carried, buried or eaten	pods dry out, split and fling



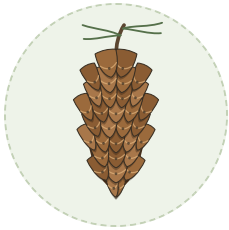
☐ **Maple keys**

spin



☐ **Dandelion**

float



☐ **Pinecone**

seeds flutter out



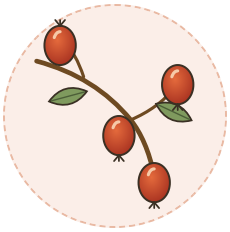
☐ **Burdock burr**

hitches a ride



☐ **Acorn**

gets buried



☐ **Red berries**

get eaten



☐ **Dry pod**

pops open

Draw it here

☐ **My own find**

How does it travel?

✦ A burr gave someone an idea

In 1941, George de Mestral picked burrs off his dog after a walk. Under a microscope he saw tiny hooks, and that gave him the idea for hook-and-loop tape, the kind on some shoes and coats.

FOR GROWN-UPS

Every seed shape has a job. Wings and fluff catch the wind, hooks grab passing fur, and tasty fruit tempts birds. When your child links a shape to a way of travelling, they're thinking like a botanist.

PLAY IT YOUR WAY

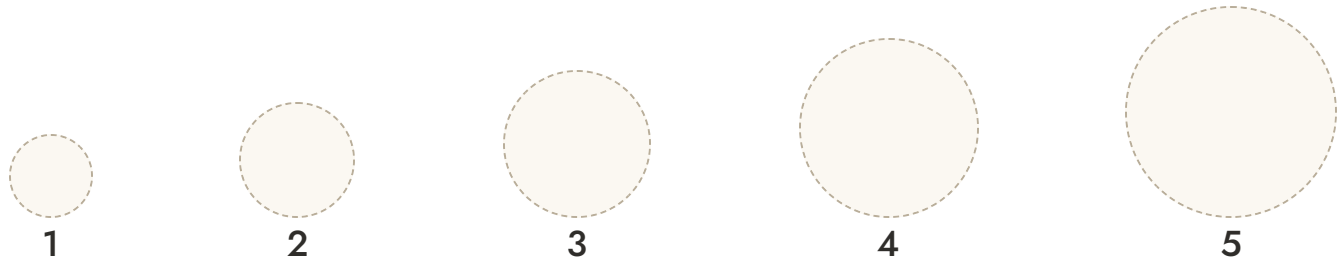
Easier: Spot and tick any seed. Read the tag aloud and act it out together: spin, float, stick or pop.
Stretch: Sort your real finds into four piles by how they travel. Which pile is biggest?

Small to Big

Line up your finds, then sort them by how they feel.

Put one real find in each circle, from the smallest to the biggest.

Smallest to biggest



Now touch each find and put it with the word that fits. Count each pile.



Smooth
like an acorn

How many?



Bumpy
like a pinecone

How many?



Fluffy
like a dandelion clock

How many?



Prickly
like a burdock burr

How many?

Big tree, little seed

A giant sequoia, one of the biggest trees on Earth, grows from a seed about the size of an oat flake. A small seed can make a very big tree.

Talk about it

Which find is the heaviest? Is it also the biggest?
Which one would you like to plant?

FOR GROWN-UPS

Putting things in order of size and grouping them by feel are early maths and science skills: comparing, describing and sorting. Touch words like smooth and prickly grow vocabulary too.

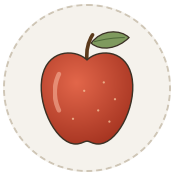
PLAY IT YOUR WAY

Easier: Compare just two finds: which one is bigger? Then feel them with eyes closed.
Stretch: Line up five finds, then add a sixth. Where does it fit?

Whose Seed Is It?

Every kind of tree makes its own kind of seed.

Draw a line from each seed to the tree it comes from.

SEED		TREE	
 Acorn	●	●	Pine 
 Maple keys	●	●	Apple tree 
 Pinecone	●	●	Oak 
 Apple seeds	●	●	Maple 

Seed detective: find a tree near you and look on the ground under it. Draw the seeds you find.

Our tree: _____

✦ Why travel?

A seed that lands right under its own tree gets little sunlight and little room to grow. That's why so many plants send their seeds farther away.

FOR GROWN-UPS

Matching seeds to trees shows children that seeds come from plants, and that each kind of tree has its own. Looking under a real tree turns the page into a small field trip.

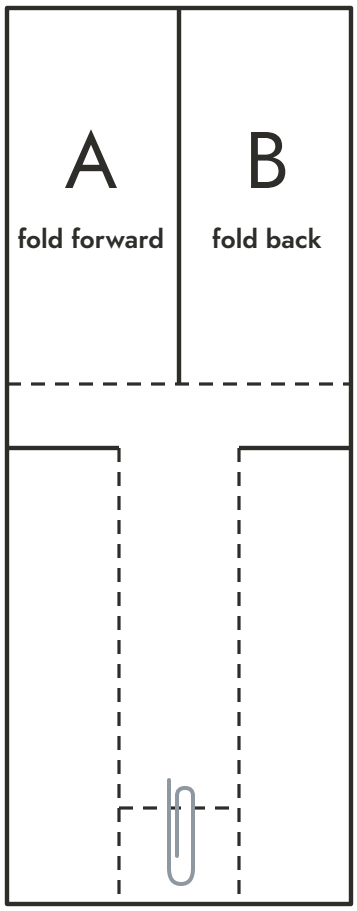
PLAY IT YOUR WAY

Easier: Match one pair at a time: hold a real acorn next to the page and find the oak leaf.
Stretch: Write the tree names, then find a seed whose tree isn't on the page.

Spinner Drop Test

Make a paper spinner and race it against a real maple key.

Hold your things up high, all at the same height, and let go together.



Cut on solid lines

Fold on dashed lines

Make it

1. Cut out the spinner on the solid lines (a grown-up can help).
2. Fold wing A forward and wing B back.
3. Fold both sides in along the dashes, fold up the bottom and add a paper clip.

Which lands last? Tick your guess, then test it three times.

DROP IT	MY GUESS	TRY 1	TRY 2	TRY 3
Maple key	☐	☐	☐	☐
Paper spinner	☐	☐	☐	☐
A leaf	☐	☐	☐	☐
A pebble	☐	☐	☐	☐

Why spin?

A falling maple key spins like a little helicopter. Spinning slows its fall, so the wind has more time to carry it away from its tree.

FOR GROWN-UPS

Guessing first and then testing is how scientists work. A fair test means dropping everything from the same height at the same time, and trying more than once.

PLAY IT YOUR WAY

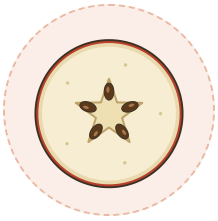
Easier: Drop just two things, a maple key and a pebble, and watch which one spins.

Stretch: Make a second spinner with shorter wings. Does it fall faster or slower?

How Many Seeds Inside?

Guess first, then count. A grown-up does the cutting.

Look at the outside and guess how many seeds are inside. Then open it up and count.



Apple

cut it across, not down

I guess ○ I counted ○

Draw the inside



Pea or bean pod

open it along the seam

I guess ○ I counted ○

Draw the inside

Your choice

a pepper, a tomato, an orange?

I guess ○ I counted ○

Draw the inside

Lay the apple seeds in the boxes, one in each.

1	2	3	4	5
6	7	8	9	10

✦ A star inside

Cut an apple across its middle and you'll find a star with five little rooms. Each room usually holds up to two seeds, so an apple often has ten seeds or fewer.

FOR GROWN-UPS

Guessing and then counting builds number sense: children learn what "about five" looks like. Placing seeds one by one in a ten-frame shows how numbers fit together to make ten.

PLAY IT YOUR WAY

Easier: Count the apple seeds together, touching each one as you say the number.
Stretch: Add up the seeds from all three, or compare: which one had the most?