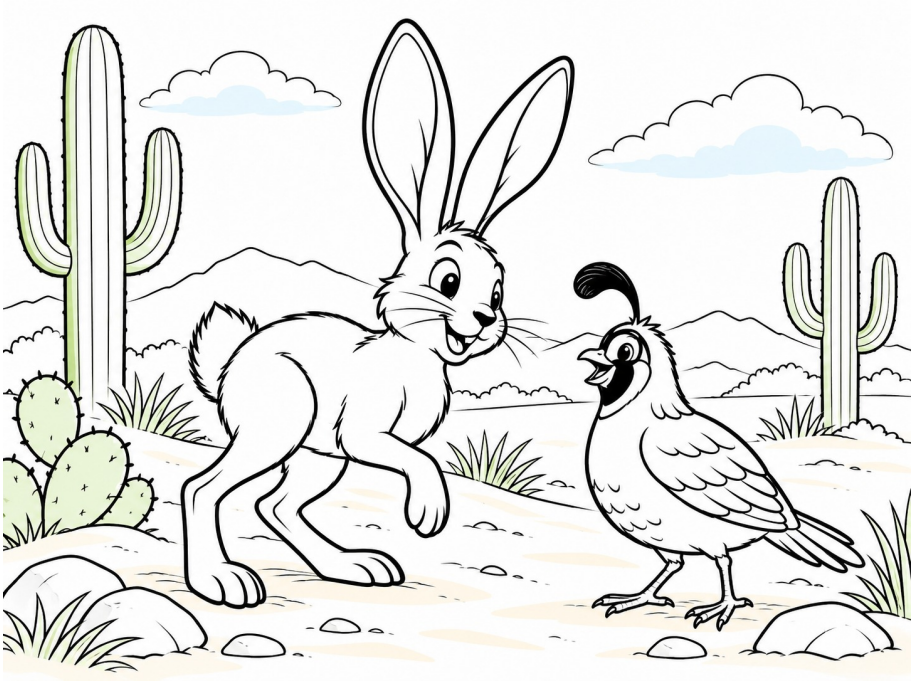
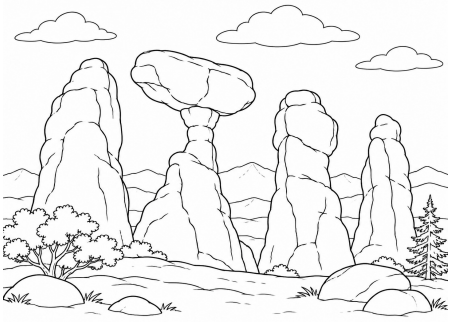
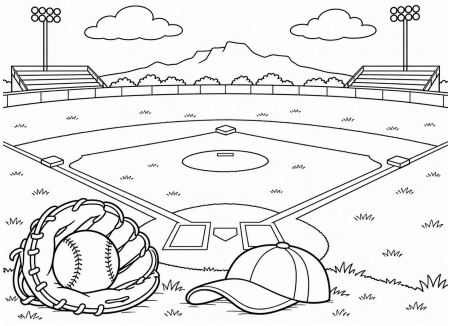
CACTI ROCK TOWERS AND A BASEBALL STOP **FAMILY GUIDE**

Southern Arizona

A Wild Base Family activity book for ages 4-6, 7-9 and 10+







PRINT BY AGE | PAGE RANGES

Ages 4-6: activities 3-14; answers 39-41.
Ages 7-9: activities 15-26; answers 42-44.
Ages 10+: activities 27-38; answers 45-47.
Shared parent guidance and sources: 48-50.

This book belongs to

Choose your discoveries

Choose a comfortable challenge. Each age packet teaches what it needs and includes complete answers. Reading aloud, pointing and talking count.

AGES 4-6 | ACTIVITIES 3-14 | ANSWERS 39-41

Friendly coloring, four-picture stories, matching, food sorting, picture patterns, counting and a family guessing game.

AGES 7-9 | ACTIVITIES 15-26 | ANSWERS 42-44

Science sequences, food webs, comparison math, word search, crossword, evidence clues, history and dots and boxes.

AGES 10+ | ACTIVITIES 27-38 | ANSWERS 45-47

Pictured science mysteries, ecological evidence, a changing model, a route code, naturalistic observation and independent Sudoku.

PRINT AND PACK

Print US Letter at actual size, or fit to A4. Grayscale works. Pack a pencil, crayons and a clipboard. Each separate packet has activities 1-12, answers 13-15 and references 16-18.

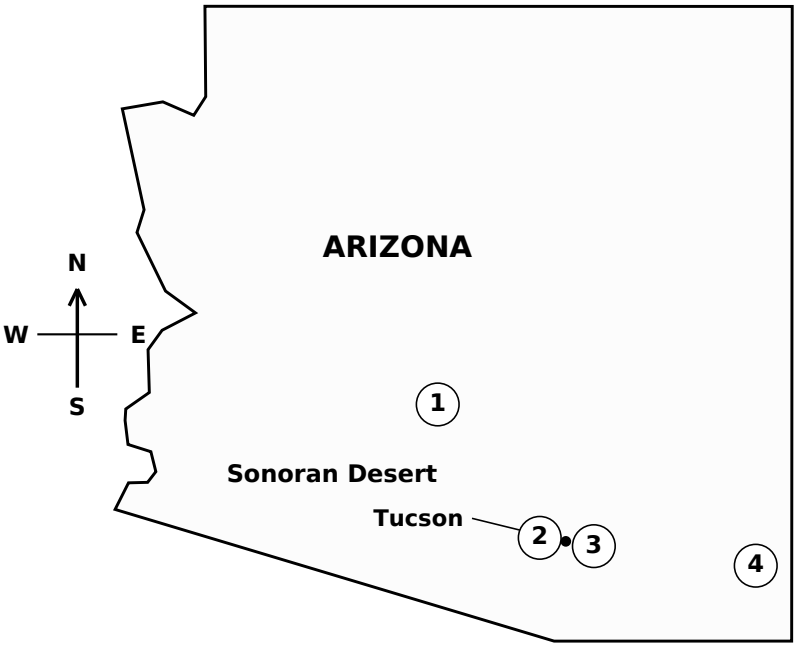
Shared guidance and sources: pages 48-50. Answer references use the ordinary page numbers in the PDF you are reading.

Passenger play only; keep the driver free to concentrate.

START YOUR EXPLORER PACKET **AGES 4-6**

Hello desert and mountains

Circle the two Saguaro stops and put a star beside Chiricahua.



1 Phoenix / Chase Field

2 Saguaro West

3 Saguaro East

4 Chiricahua

◯ Numbered visitor stop

2 and 3: one park around Tucson

Simplified regional locator.
North is at the top.

FOUR PLACES TO EXPLORE

Phoenix: a city baseball stop. Saguaro West and Saguaro East: two districts of one cactus park. Chiricahua: mountain rock towers.

Point to Phoenix and Chiricahua. Find both Saguaro districts.

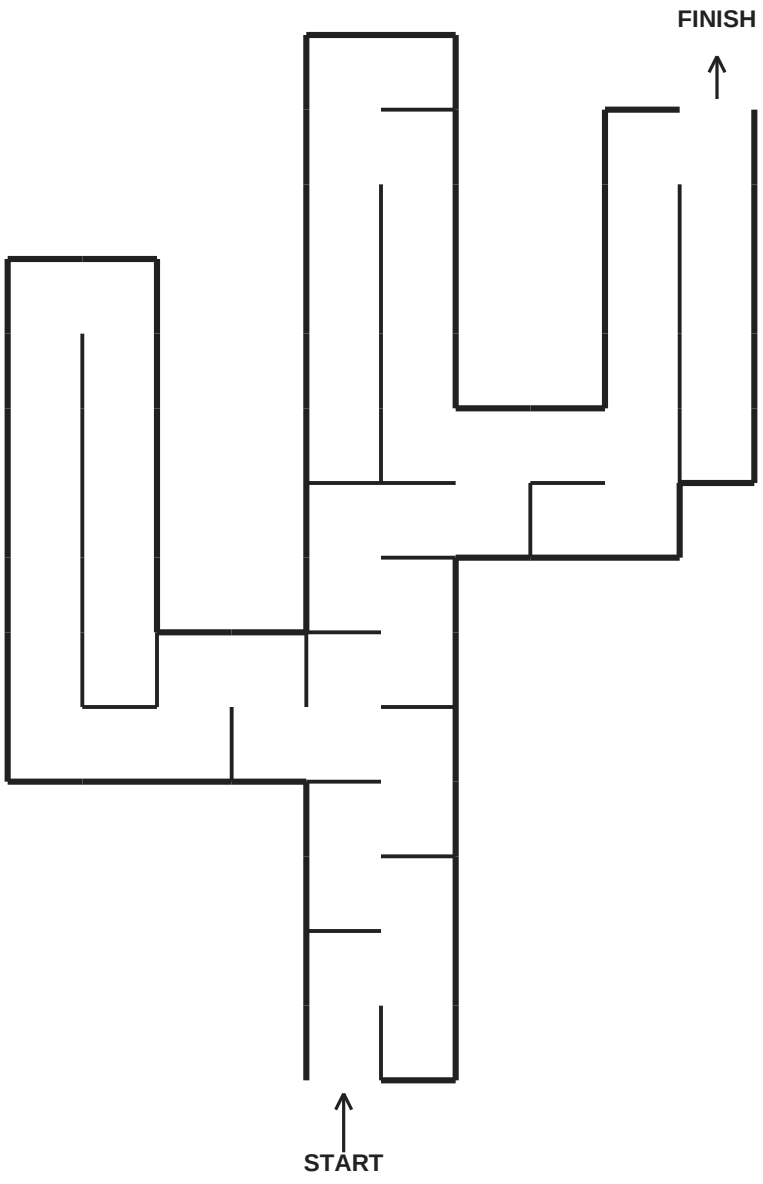
Choose one place above to investigate in this packet.

Answers: page 39 (Routes and first discoveries).

SHAPED MAZE | GENTLE **AGES 4-6**

A path inside a saguaro

Find the path from START at the base to FINISH in the cactus arm.



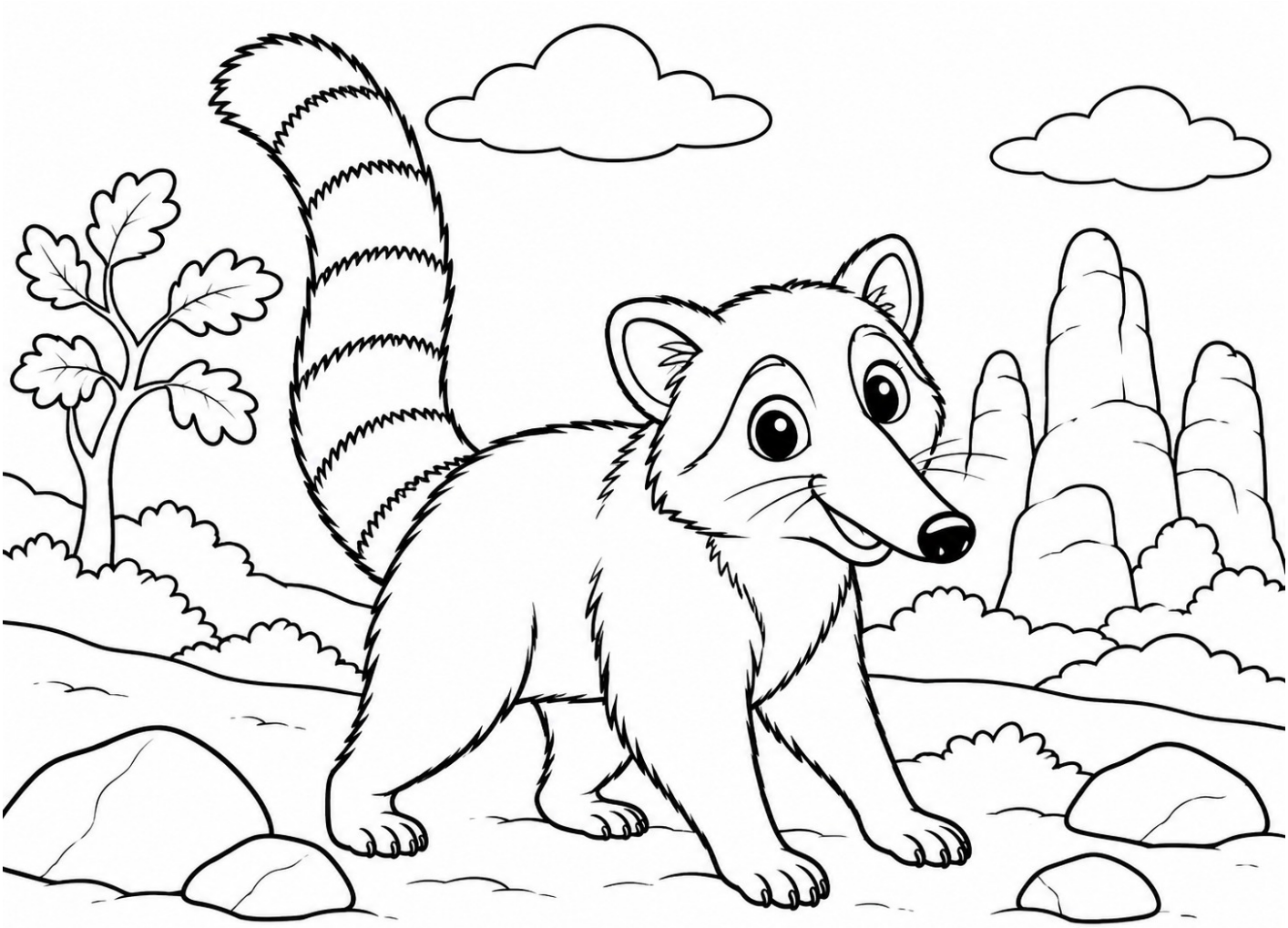
A LIVING WATER STORE

A saguaro stores water in its stem. Folds called pleats can spread as the stem fills. Point to the broad stem. Imagine its folds opening after rain.

COLOR AND LOOK CLOSELY **AGES 4-6**

Meet a curious coati

Color the animal. Find its ears, nose and feet. Leave some white space if you like.



LOOK CLOSELY

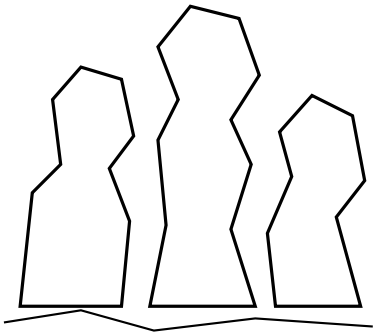
A coati uses its long nose while searching for food. Coatis eat fruit and small animals such as insects.

ORDER THE ROCK PICTURES **AGES 4-6**

A tower story

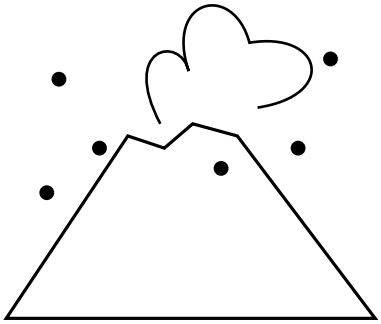
Number the pictures 1, 2, 3 and 4 to tell the rock-tower story.

A



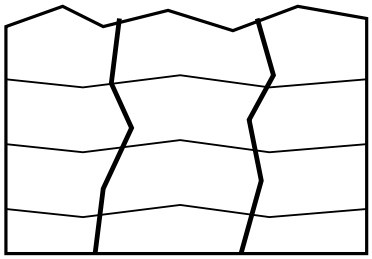
Tall pinnacles remain.

B



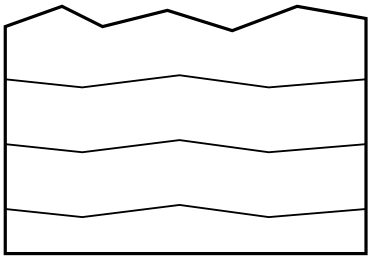
Volcanic ash settles.

C



The rock cracks.

D



Ash becomes solid tuff.

DISCOVERY

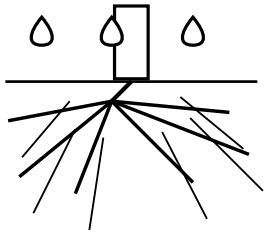
Volcanic ash became rock. Cracks, weathering and erosion helped shape the towers.

MATCH AND DRAW **AGES 4-6**

A cactus and the rain

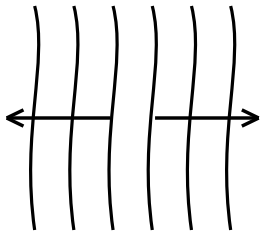
Point to the picture that matches each clue. Then add a water-flow arrow below.

A



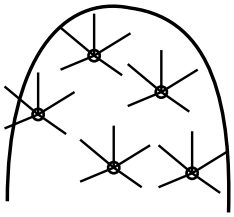
Parts below the soil.

B



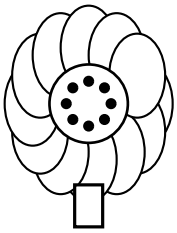
Folds along a stem.

C



Sharp protective points.

D



A place with pollen.

Match these clues to A-D: pollen ___ water uptake ___ protection ___ folds ___



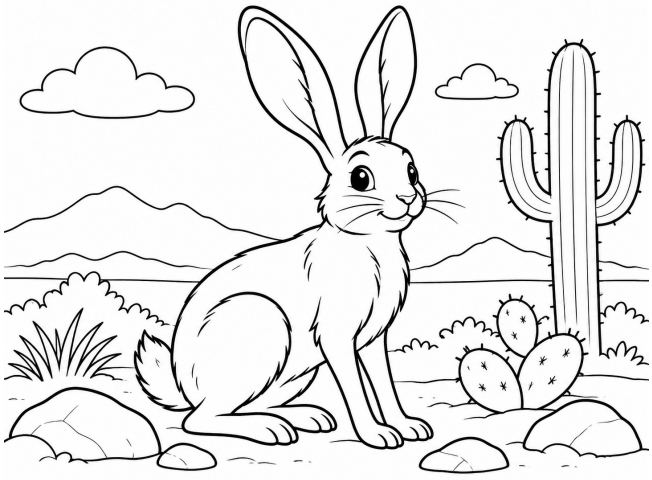
RAIN **ROOTS**

Draw an arrow showing water moving from rain toward the roots.

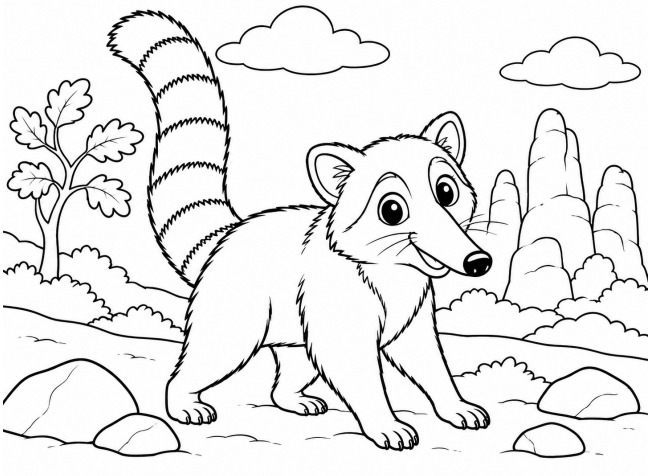
WILDLIFE SORTING **AGES 4-6**

What is for lunch

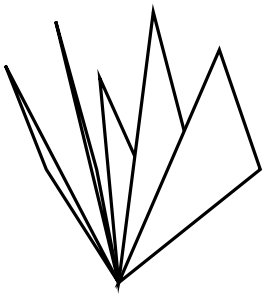
Draw lines from each food to the animal that eats it. Jackrabbits eat grass. Coatis eat fruit and insects.



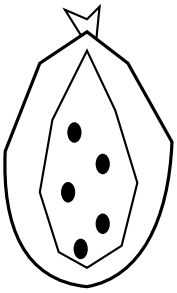
JACKRABBIT



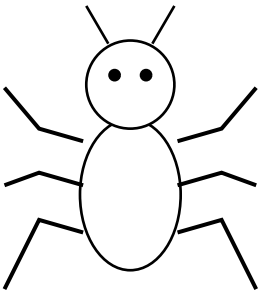
COATI



GRASS



FRUIT



INSECT

COUNT AND CIRCLE

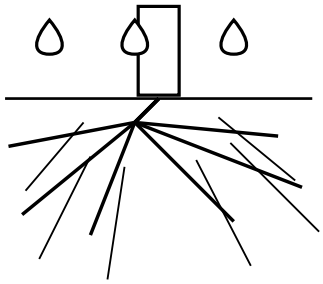
How many food pictures? ____

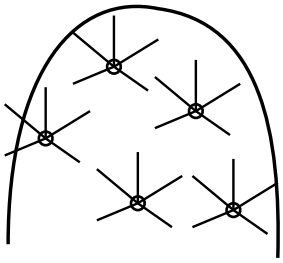
Circle the foods that come from plants.

LOOK SAY AND DRAW **AGES 4-6**

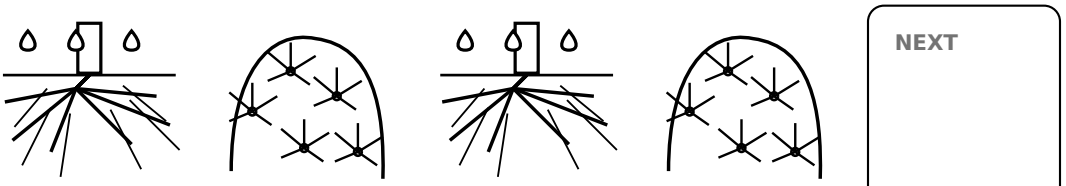
Cactus picture patterns

Look at each picture pattern. Draw the picture that comes next.

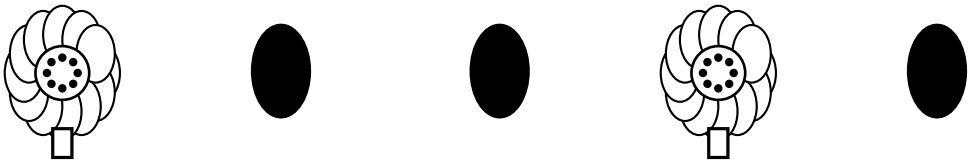




Compare the two shapes. Look for the repeating part.



NEXT



NEXT

Draw 2 pairs of seeds. How many altogether? ____

TWO PAIRS

PEOPLE AND HISTORY AGES 4-6

A place with a long story

Saguaro has a human story far older than its park name. Read the three parts with a grown-up.

LONG AGO

People knew and used desert plants long before a national park existed.

IN 1994

Saguaro became a national park, a place set aside to be protected.

TODAY

Tohono O’odham people continue a saguaro fruit harvest. Their community is part of the present.

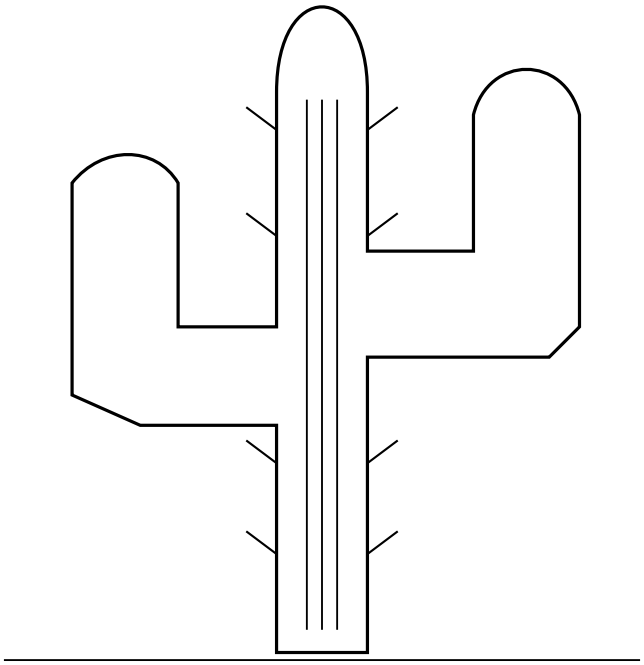
Point to the earliest part. Circle TODAY. Talk about one way your family can care for a place.

DRAW YOUR CARE-FOR-A-PLACE IDEA

COUNT AND BUILD **AGES 4-6**

Build a cactus water store

Color the big picture. Then draw the small parts and count them.



WATER IN A CACTUS

A saguaro takes up rain through its roots. Its pleats spread as the stem stores water.

Draw 4 water drops, then 3 more. How many? ____

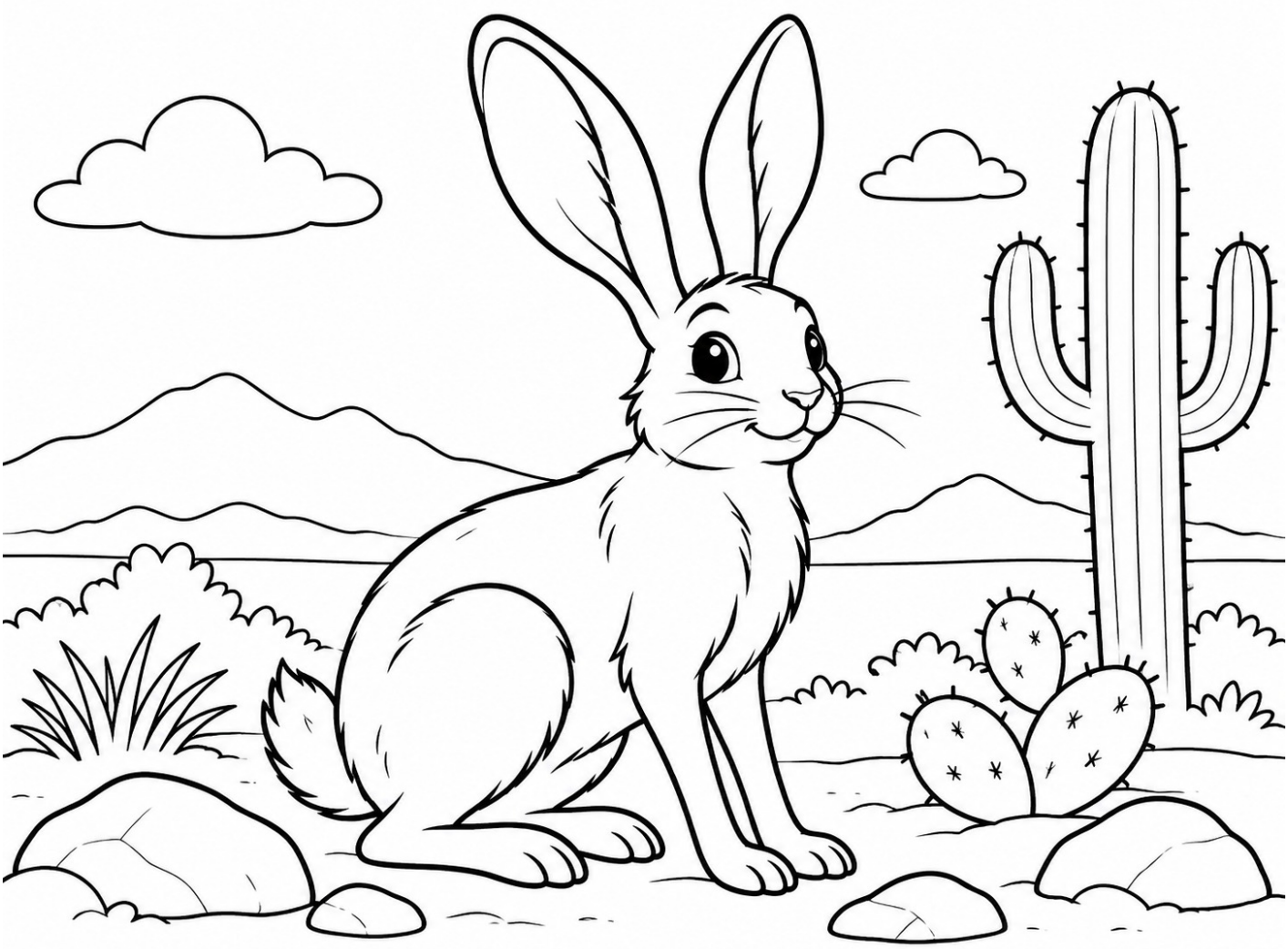
4 + 3

5 + 2 = ____ 8 - 3 = ____

COLOR AND NOTICE AGES 4-6

A desert full of shapes

Color the jackrabbit scene and point to a long shape, a round shape and a branching shape.



LOOK AT THE SCENE

Find a long ear, a round pad and a branching cactus. The rabbit is an animal; the cactus is a plant.

FAMILY ROAD BREAK AGES 4-6

I spy desert shapes

Take turns choosing a picture in this packet. Give a shape clue without saying its name. Everyone else guesses.

TRY A CLUE

“I spy a plant with tall branching arms.”
“I spy an animal with very long ears.”
“I spy a narrow tower made of rock.”

DRAW A NEW CLUE

ONE MORE ROUND

Tell a shared story using cactus, bird and rock. Each person adds one sentence.

Keep the driver free to concentrate.

REMEMBER AND SHARE AGES 4-6

My desert discoveries

Choose a discovery from this packet or a visit. Draw it and tell someone what you learned. A grown-up may write your words.

A PLACE THAT SURPRISED ME

A CLUE I WANT TO REMEMBER

My new word is

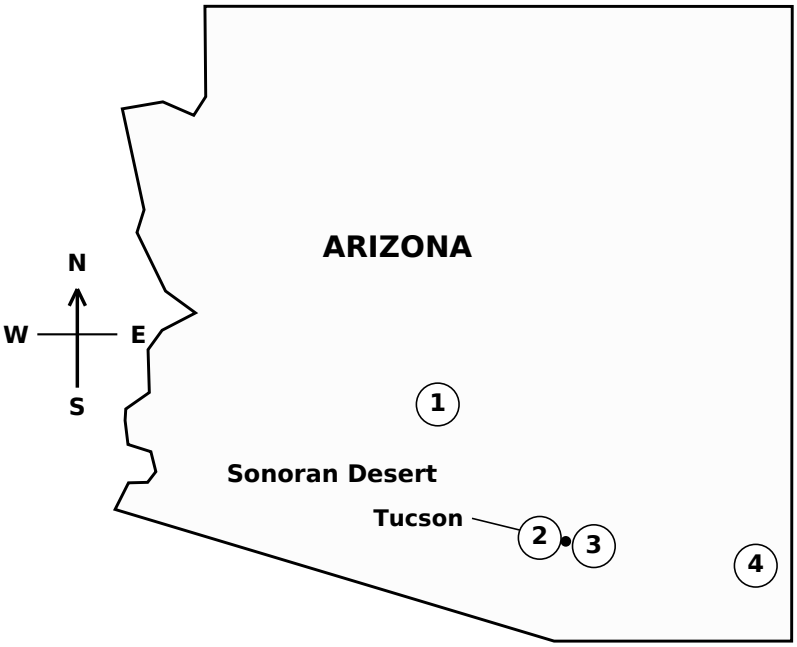
One thing I can explain now is

Show your favorite page to someone in your family.

START YOUR EXPLORER PACKET AGES 7-9

Desert mountain city

This journey links Saguaro’s two districts near Tucson, Chiricahua’s rock towers and sky-island habitats, and a northern baseball stop in Phoenix.



1 Phoenix / Chase Field

2 Saguaro West

3 Saguaro East

4 Chiricahua

◯ Numbered visitor stop

2 and 3: one park around Tucson

Simplified regional locator.
North is at the top.

FOUR PLACES TO EXPLORE

Phoenix: a city baseball stop. Saguaro West and Saguaro East: two districts of one cactus park. Chiricahua: mountain rock towers.

Which stop is farthest north? Which one is farthest east?

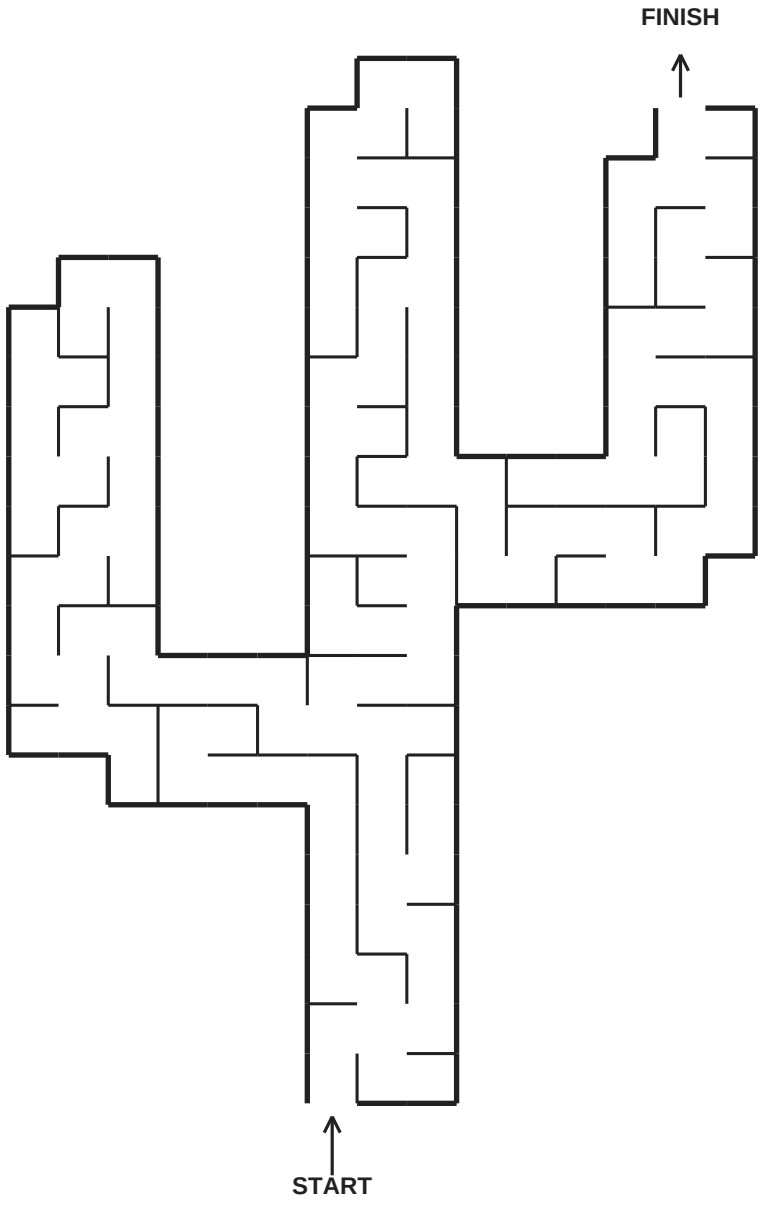
Choose one place above to investigate in this packet.

Answers: page 42 (Routes and first discoveries).

SHAPED MAZE | MODERATE **AGES 7-9**

The branching cactus route

Find a path from the base to FINISH. Search the trunk and both arms. At a fork, look ahead for a dead end before you turn.



PLEATS WITH A PURPOSE

A saguaro’s stem stores water. Its pleats allow expansion and contraction as the water store changes. Find a long trunk passage, then imagine folds along a real cactus.

SEQUENCE AND EXPLAIN AGES 7-9

From ash to standing stone

Put the process cards in order. Use cause and effect, not just a guess about which word sounds first.

A
Cracks form in solid tuff.

B
Erosion carries loosened material away.

C
Ash becomes solid rock.

D
Volcanic ash and debris settle.

E
Weathering loosens rock along cracks.

Order: ____ → ____ → ____ → ____ → ____

Which step makes a clue visible or removes material? Explain.

Connect one step to something you could notice in a park picture.

BUILD A FOOD WEB AGES 7-9

A cactus feeds a community

A saguaro uses sunlight. Its nectar feeds bats. Its fruit feeds coyotes and cactus wrens. Food arrows point from food to the animal receiving energy.

BUILD THE CONNECTIONS

Connect sunlight to saguaro. Link saguaro to nectar and fruit with dashed arrows. Add three feeding arrows from food to eater.

SUN

SAGUARO

NECTAR

BAT

FRUIT

CACTUS WREN

COYOTE

Trace one linked route through the community.

NOTICE AND CONNECT

Which two animals share the same fruit food? Which animal uses nectar?

COMPARE AND CALCULATE AGES 7-9

Compare places and numbers

Use the numbers in each story. Show how you know, then compare the two pictured discoveries.

1 COMPARE THE MODEL

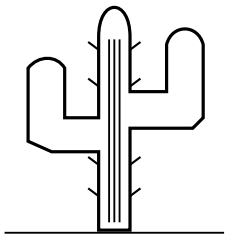
A low station is 28°C and a high station is 13°C. How many degrees cooler is the high station?

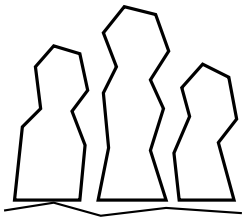
2 A FAMILY STOP

A family watches for 17 minutes and sketches for 14. How many minutes is that altogether?

3 TIME TO EXPLORE

You have 75 minutes at a stop. The first two activities take 31 minutes. How much time remains?





NOTICE AND CONNECT

A cactus grows by making living tissue. Weathering and erosion shape rock towers. Which picture shows a living thing?

WORD SEARCH AND SORT **AGES 7-9**

Find the cactus connections

Find eight words going right, down or diagonally down-right. Then sort every found word into one of the three groups below.

Z	M	X	Q	H	P	A	F	Z	L	O	A
O	U	Z	E	A	L	Q	L	B	K	P	D
F	N	T	U	F	E	M	O	F	V	R	X
D	D	Y	Q	O	A	I	W	R	H	O	Z
Q	E	H	S	A	T	B	E	U	K	O	I
X	W	M	E	Z	N	I	R	I	A	T	C
E	S	Q	G	A	V	R	N	T	Y	V	P
X	S	P	Z	P	H	D	O	S	B	S	B
Z	J	Q	I	Y	E	N	Q	U	J	Q	J
F	Y	D	I	N	O	E	N	Y	F	T	M
O	R	G	W	W	E	O	S	E	E	D	J
B	A	T	G	B	R	C	E	D	I	K	V

FLOWER FRUIT SEED ROOT

SPINE PLEAT BIRD BAT

PLANT PARTS: _____

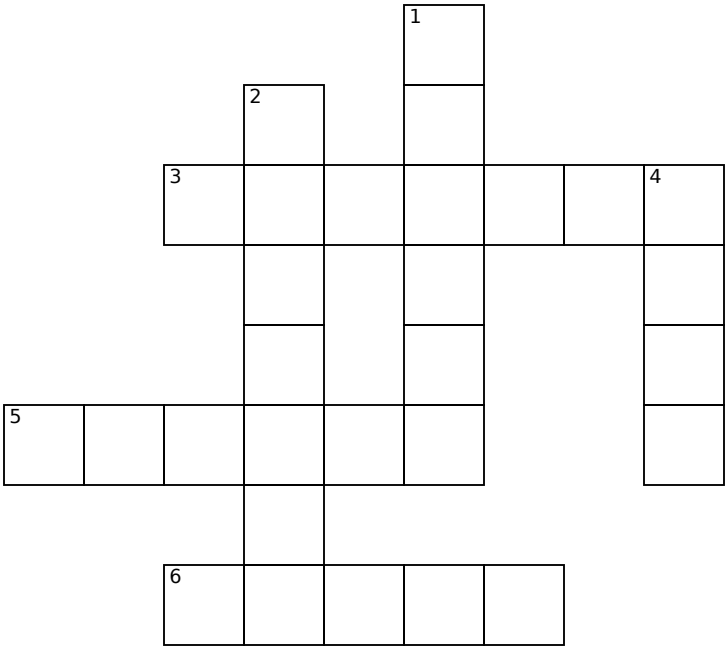
FLOWER TO NEW PLANT: _____

ANIMAL VISITORS: _____

USE YOUR NEW VOCABULARY **AGES 7-9**

Desert toolkit crossword

Use the clues and discoveries from this packet. Put one letter in each square. Check the crossing letters.



ACROSS

3. The place and conditions in which a living thing lives. (7)

5. Folds that let the cactus stem expand. (6)

6. Parts that take up water from the soil. (5)

DOWN

1. Sharp cactus parts that help protect it. (6)

2. Tall cactus whose stem can store water. (7)

4. Rock formed from volcanic ash and debris. (4)

NOTICE AND CONNECT

Choose one plant word and one landscape word. Explain how each helps you understand this region.

DEDUCE FROM EVIDENCE AGES 7-9

The missing feature labels

Four field notes A-D lost their labels. Each describes a different feature. Use every clue to restore the names.

THE FOUR FEATURES

Roots: take up water from soil. Pleats: stem folds that can expand. Spines: sharp protective parts. Flower: has pollen and can develop into fruit.

1. A and C are parts along the stem.

2. B takes up water below the ground.

3. Only D has pollen.

4. C is sharp and helps protect the plant.

Note	Feature name	Clue that helped
A		
B		
C		
D		

Explain how identifying B and D made A easier to solve.

More than dates on a timeline

People knew these places before their federal designations. Tribal communities continue their relationships with the land today.

1994
Saguaro becomes a national park.

1933
Saguaro is established as a national monument.

1961
The western Tucson Mountain District is added.

1. Put the three dates in order from earliest to latest.

2. How many years passed between the first and last dates?

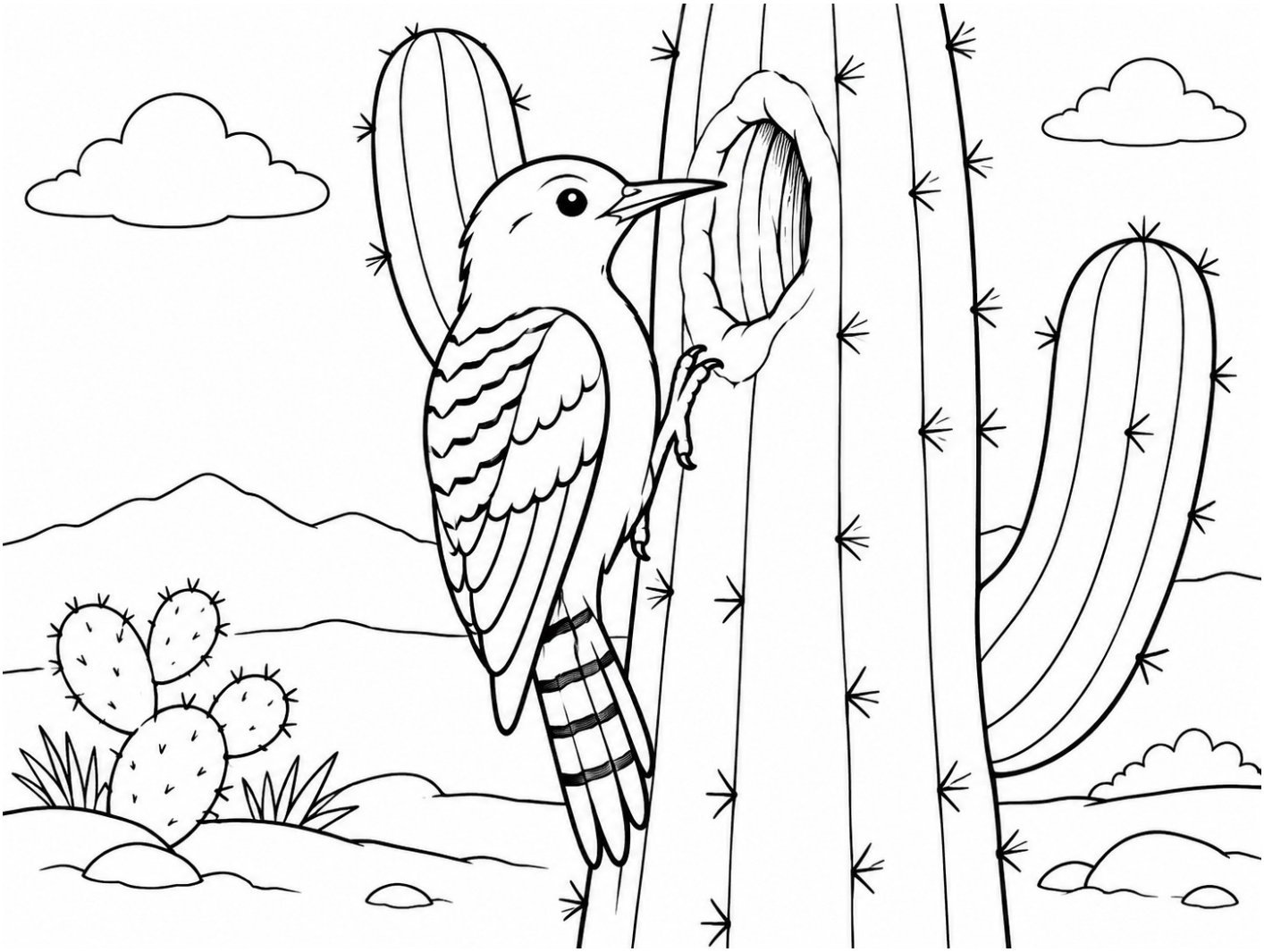
Show your subtraction.

THINK BEYOND THE DATES
Why would beginning this place’s story with a federal designation leave out important people and relationships?

COLOR AND LOOK CLOSELY **AGES 7-9**

A cactus can be a home

Gila woodpeckers can excavate cavities in saguaros. Other birds may later use an old cavity. The same cactus can offer shelter as well as flowers and fruit.



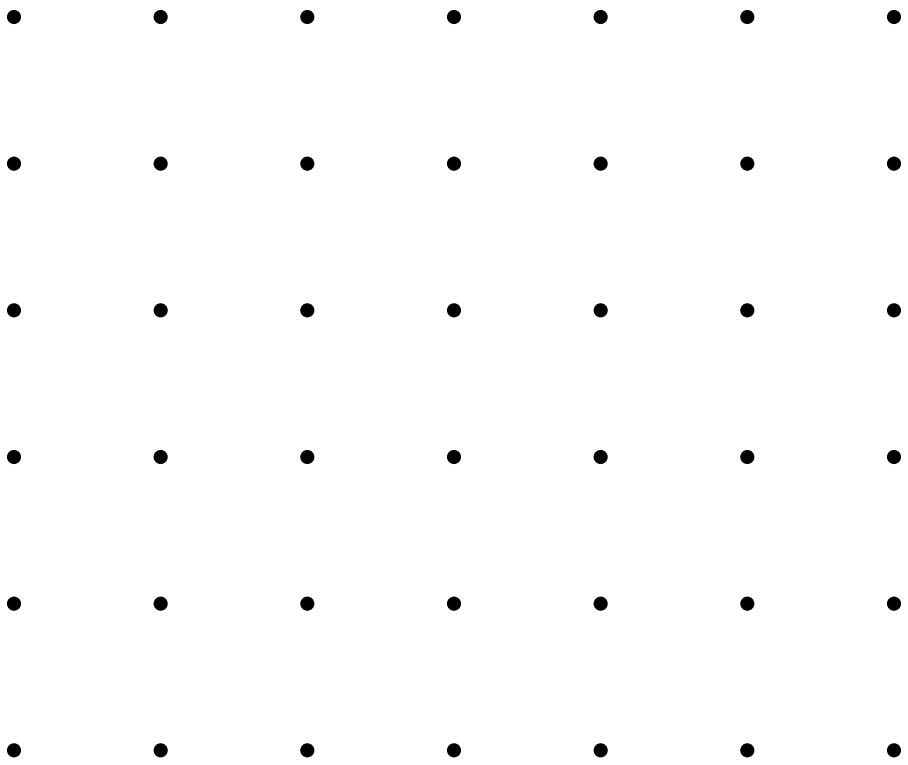
COMPARE VISIBLE FEATURES

Compare the bird’s pointed bill with the cactus cavity. How can a feature made by one bird help a later bird?

Dots and boxes on the road

Two players connect neighboring dots horizontally or vertically. Complete a box? Add your initial and take another turn. Most boxes wins; equal scores tie.

Player initials: ____ and ____



How many boxes can be claimed? ____

Final score: ____ to ____

A MEMORY ROUND

Name a discovery. The next person repeats it and adds another. How long can your shared list grow?

REMEMBER AND EXPLAIN AGES 7-9

My evidence and memories

Choose Saguaro, Chiricahua or the baseball stop. Record one discovery, a detail that supports it and a question you still have.

Place and discovery

A DETAIL THAT SUPPORTS MY IDEA

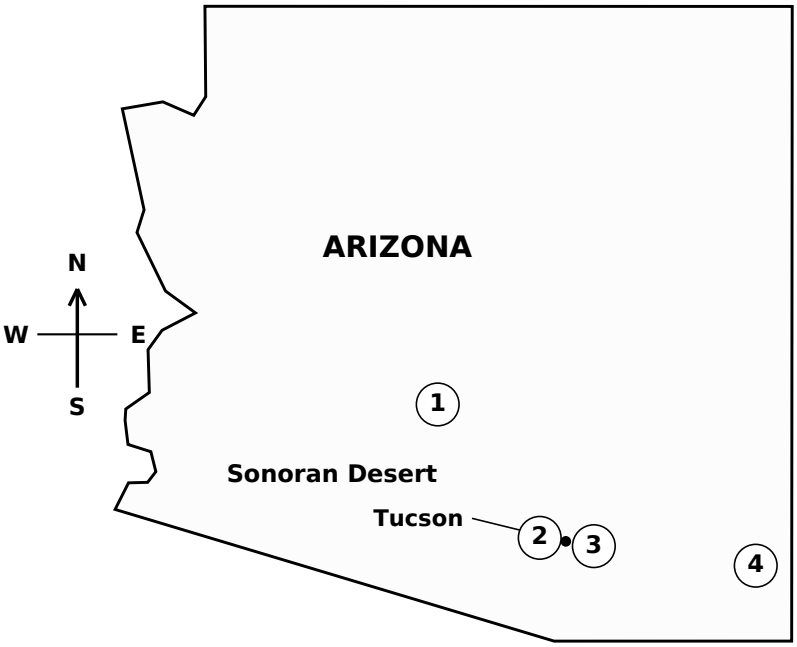
This detail matters because

One question I want to explore next

START YOUR EXPLORER PACKET AGES 10+

Investigate a varied region

A habitat is a living thing’s home environment. Compare a desert cactus, a mountain habitat and a rock tower: each leaves different kinds of evidence.



1 Phoenix / Chase Field

2 Saguaro West

3 Saguaro East

4 Chiricahua

◯ Numbered visitor stop

2 and 3: one park around Tucson

Simplified regional locator.
North is at the top.

FOUR PLACES TO EXPLORE

Phoenix: a city baseball stop. Saguaro West and Saguaro East: two districts of one cactus park. Chiricahua: mountain rock towers.

Which stop is farthest north? Which one is farthest east?

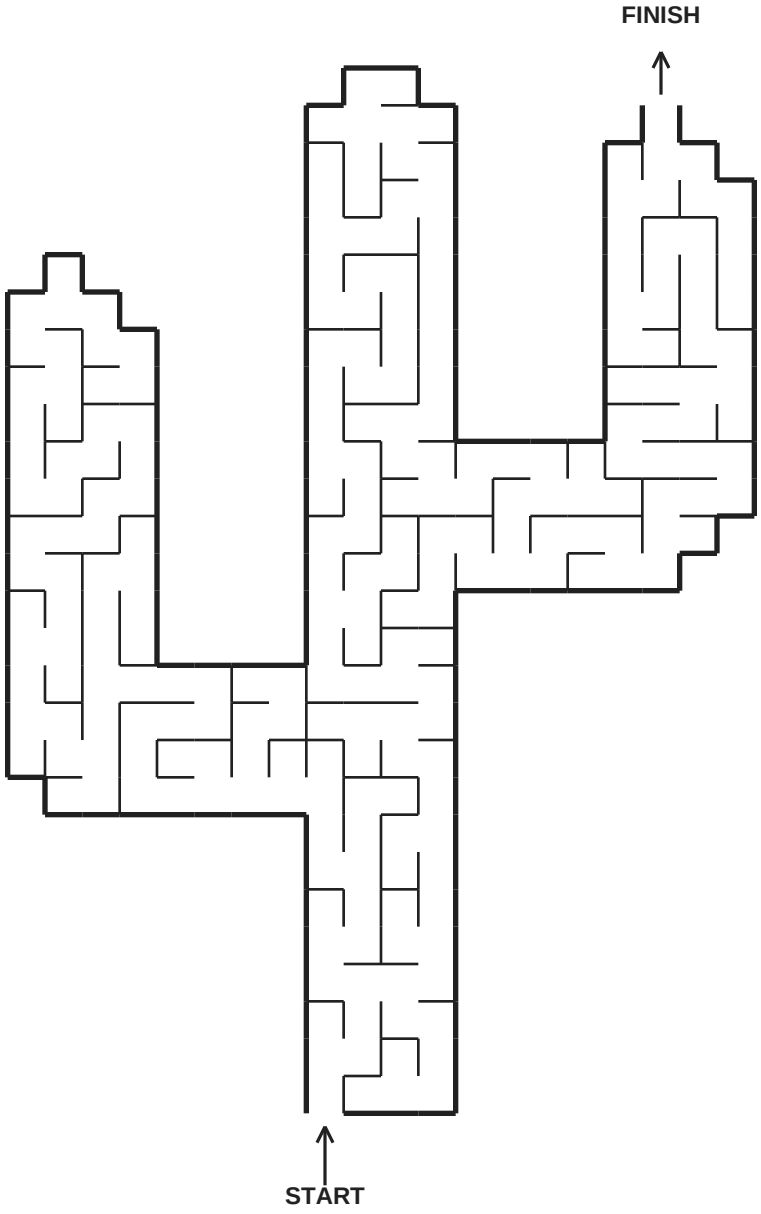
Choose one place above to investigate in this packet.

Answers: page 45 (Routes and first discoveries).

SHAPED MAZE | CHALLENGING **AGES 10+**

The saguaro network

Find the route from the base to FINISH through trunk and arms. Keep track of alternate branches; several extend well beyond the first turn.



SURVIVAL IN THE STEM

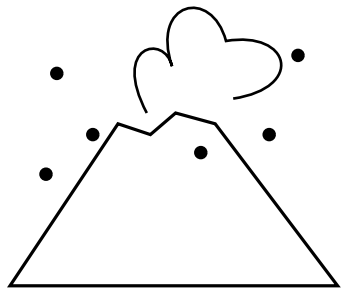
A saguaro is a living water store, with pleats that allow changes in volume. The shallow roots, storage stem and protective spines work as a system.

ILLUSTRATED SCIENCE MYSTERY **AGES 10+**

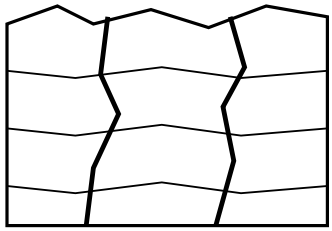
Catch the rock story mix up

Match three label cards to the three scenes. Cross out the one false card. Use the picture evidence.

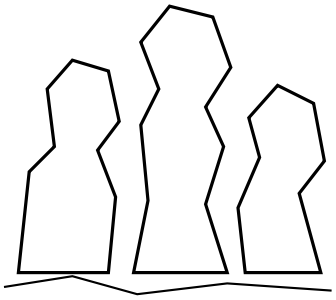
1



2



3



A | SCENE ____
Weathering and erosion leave tall pinnacles.

B | SCENE ____
Volcanic ash and debris settle.

C | SCENE ____
Every pinnacle is a fossil tree.

D | SCENE ____
Cracks divide rock made from volcanic material.

ONE MORE CLUE
A fracture is a crack. Weathering breaks rock down; erosion moves loosened pieces. Which scene shows the result of both?

BUILD AND QUESTION A FOOD WEB AGES 10+

A cactus feeds a community

A saguaro uses sunlight. Its nectar feeds bats. Its fruit feeds coyotes and cactus wrens. Food arrows point from food to the animal receiving energy.

BUILD THE CONNECTIONS

Connect the plant to the foods it makes with dashed arrows. Then draw three feeding arrows from foods to eaters.

SAGUARO

NECTAR

BAT

FRUIT

CACTUS WREN

COYOTE

Trace one linked route through the community.

EVIDENCE OR OVERREACH

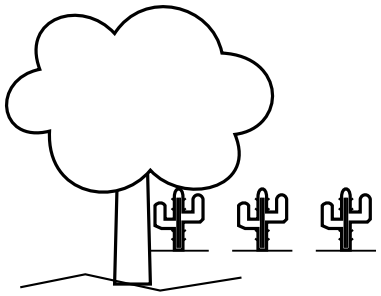
“Every animal population must change by the same amount.” Does this web prove that? Circle YES or NO. Name one other influence.

COMPARE THE CLUES **AGES 10+**

Two pictures two kinds of evidence

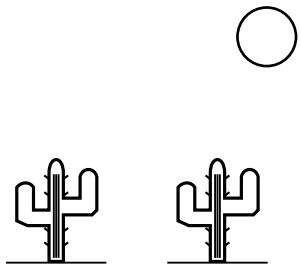
Look at both scenes. Use what each picture and caption actually shows before deciding what the evidence can prove.

A UNDER A NURSE TREE



Three marked seedlings are shaded in this equal-area model plot.

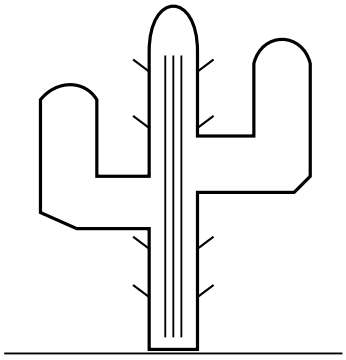
B OPEN GROUND



Two marked seedlings are in the open at the same moment.

CIRCLE A OR B

1. Which picture has more seedlings today? A / B
2. Which picture has tree shelter? A / B
3. Does one count prove a survival rate? YES / NO



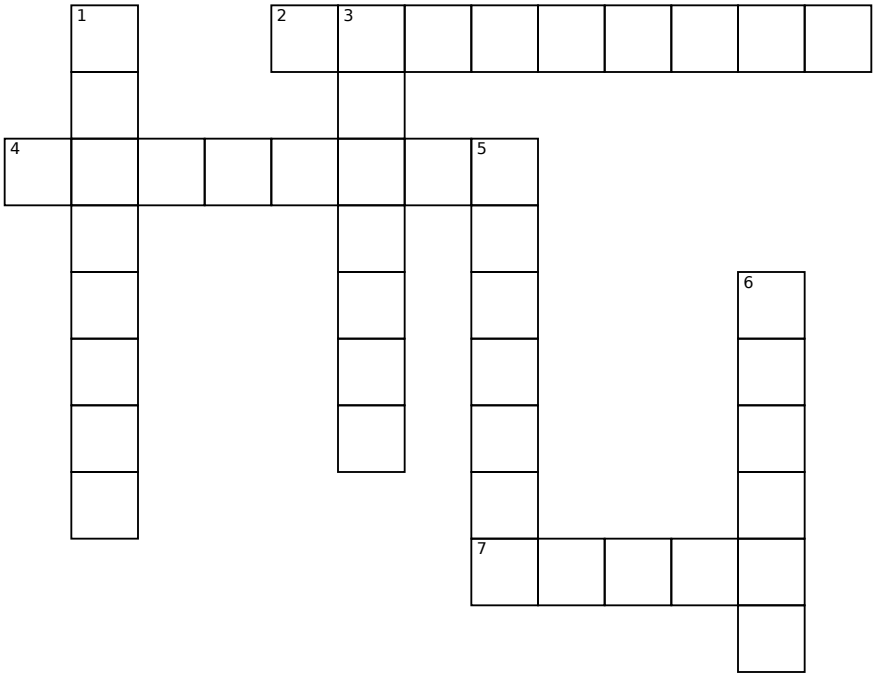
ONE MORE STUDY CLUE

Nurse trees can shelter young saguaros from sun and frost. Optional: design a fair comparison that follows the same seedlings over time.

CROSSWORD | USE EVIDENCE FIRST **AGES 10+**

Desert words connect

Use the clues and discoveries from this packet. Put one letter in each square. Check the crossing letters.



ACROSS

2. Study of the timing of seasonal life events. (9)

4. A factor that can change in a study. (8)

7. A protective tree may be called this kind of tree. (5)

DOWN

1. A crack or break in rock. (8)

3. The home environment of a living thing. (7)

5. Removal and movement of weathered material. (7)

6. Grains moved between flowers during pollination. (6)

Use one answer to improve a question you could ask at a park.

MULTI STEP CHANGING MODEL AGES 10+

A cactus changes its water store

A variable is a factor that can change. Here, incoming rain changes the stored water. Complete one round at a time.

WATER STORE MODEL

Start with 9 water counters. At night add 4 counters from rain, then use 3 during the next day. Repeat for rounds 1-4. Round 5 has no rain, but the plant still uses 3. The model tracks stored water.



Round	Before rain	After rain	After day
Start	9	-	-
1			
2			
3			
4			
5			

1. How much does storage change in each of rounds 1-4? ____

2. How many counters remain after round 5? ____

3. Why does the last round change the pattern?

SYSTEM ROUTES AND A CODE AGES 10+

Follow a connected route

Phenology is the study of seasonal timing. A flower must be open for a visiting bat to move pollen. Trace these routes, then solve a message.

TWO CONNECTED ROUTES

Route A: flower A → pollen on a bat → flower B.
Route B: saguaro fruit → eaten by a cactus wren → seeds left elsewhere.

1. Which route moves pollen between flowers? ____

2. Which part of the route connects the starting and ending places?

DECODE A DISCOVERY

Each coded letter is 5 places AFTER its real letter. Move back 5 to read it. Wrap around the alphabet. Spaces stay in place.

UTQQJS HTSSJHYX KQTBJWX

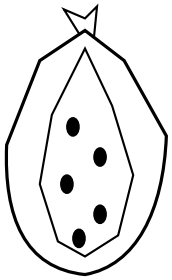
Explain how the message connects to one route or discovery.

MATCH EXHIBITS AND LABELS **AGES 10+**

The exhibit labels got mixed

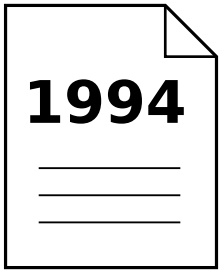
Read the three exhibits. Match each to its best label, then choose a headline that fits the whole story.

A



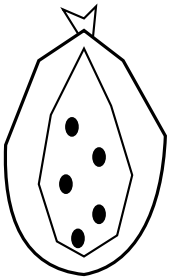
People have long gathered and used saguaro fruit.

B



In 1994, Saguaro became a national park.

C



The Tohono O’odham saguaro fruit harvest continues today.

LABELS

1 Continuing relationships and care
2 Human connections before park designation
3 A new national park

Exhibit A → label ____ B → label ____ C → label ____

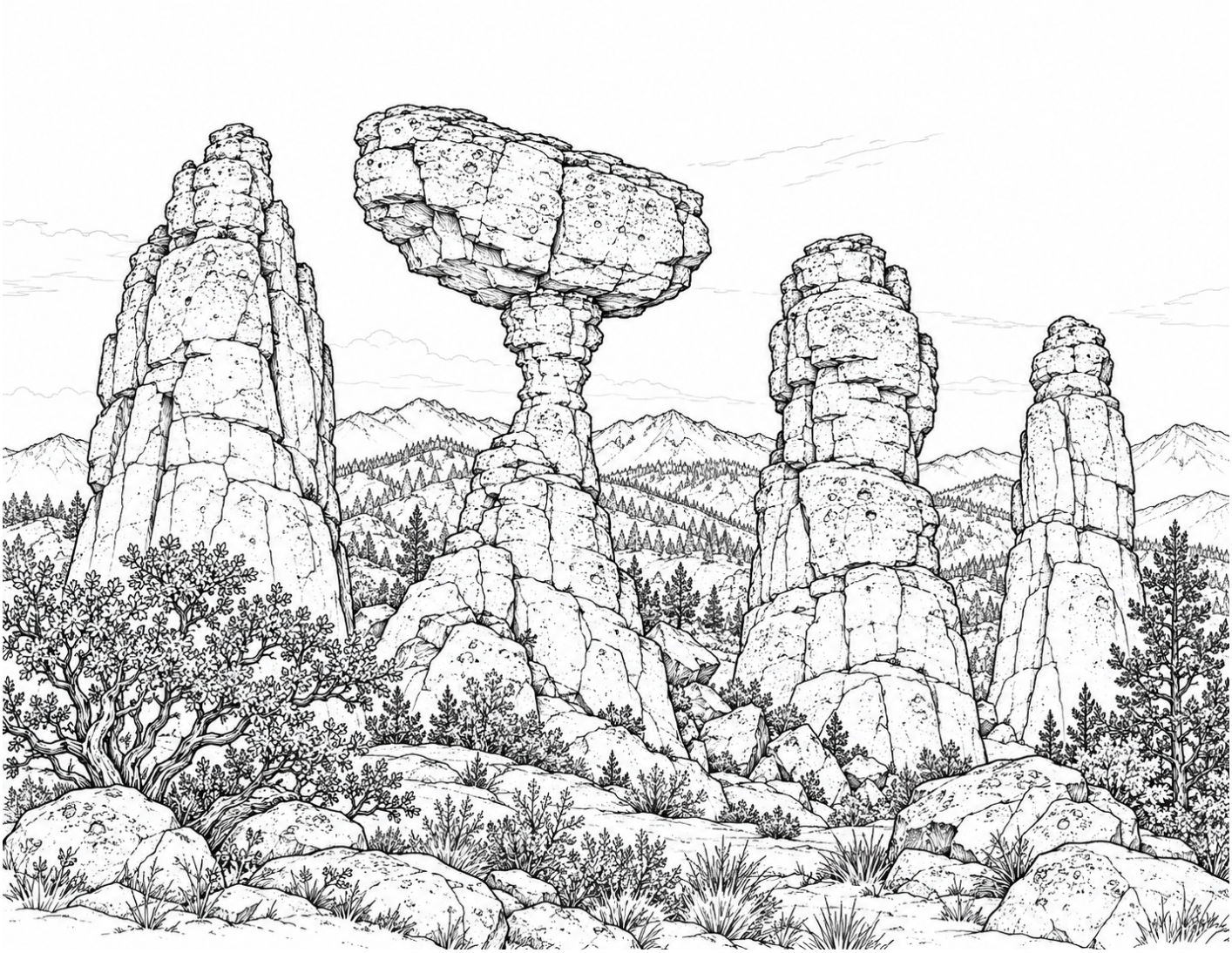
CHOOSE THE HEADLINE

Circle the best fit: HUMAN HISTORY BEGINS WITH THE PARK / A LONG PAST AND CONTINUING CONNECTIONS

GEOLOGICAL OBSERVATION AGES 10+

Trace the making of a pinnacle

Color the full landscape study. Use visible structure to explain a natural process.



STRUCTURE AND PROCESS

Label a fracture, narrow neck and broad base. Add one arrow for water entering a crack and another for loosened material moving away.

FAMILIAR ROAD BREAK AGES 10+

A desert number rest stop

Place 1-9 in every row, column and bold 3 by 3 box. Each number appears once in each. This is a quiet independent break.

							6	7
8		5					2	4
7		9	2	4		5	1	8
	4	2	8			6		
	8					2	4	9
	7		4	9			8	3
2	3	8			7			
				2				
			9	6	4			

A WAY IN

Find a row, column or box with few gaps. List its missing numbers. Use the crossing row and column to rule numbers out. Use pencil.

Afterward, teach someone one deduction you made without guessing.

SYNTHESIZE AND REMEMBER AGES 10+

Make a discovery worth sharing

Choose a question about a desert plant, a sky island, a rock tower or a living community. Support your explanation with two specific details.

My question

My explanation and two supporting details

A DIAGRAM OR DETAIL THAT HELPS EXPLAIN MY IDEA

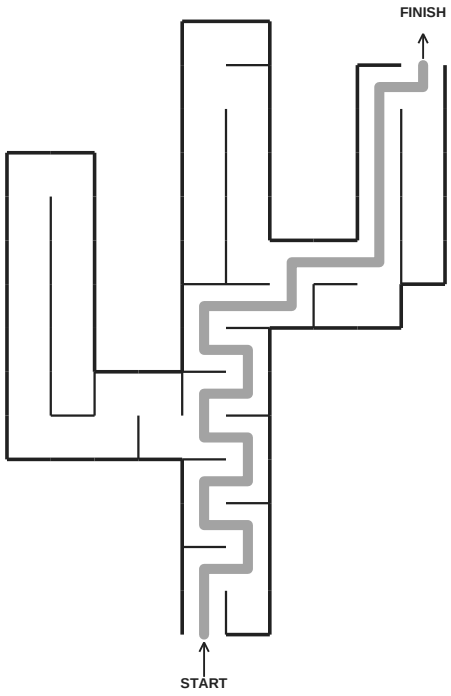
Something I want my family to remember

ANSWER KEY 1 OF 3 **AGES 4-6**

Routes and first discoveries

Try a hint first. Point to evidence in the activity before reading its answer.

Page 4 A path inside a saguaro



Page 3 Hello desert and mountains

Phoenix is farthest north; Chiricahua is farthest east. Saguaro West and East are two districts of the same park on opposite sides of Tucson.

Page 5 Meet a curious coati

Color choices vary. A coati has a long nose, four feet and a ringed tail. Its foods include fruit and insects.

Page 6 A tower story

Order B-D-C-A. Card numbers: A=4, B=1, C=3, D=2. The pictures show an eruption, solid rock, cracks and pinnacles. The towers were shaped over time, not stacked by people.

ANSWER KEY 2 OF 3 AGES 4-6

Words models and evidence

Check every crossing, calculation and clue. Several thoughtful explanations may fit the evidence.

Page 7 A cactus and the rain

Pollen D; water uptake A; protection C; folds B. The arrow points from rain toward the roots.

Page 8 What is for lunch

Three food pictures. Grass → jackrabbit; fruit and insect → coati. Circle grass and fruit.

Page 9 Cactus picture patterns

Roots; seed. The second row repeats flower, seed, seed. Two pairs have 4 seeds.

Page 10 A place with a long story

LONG AGO is earliest. Circle TODAY. Care drawings vary: stay on designated paths, leave natural objects or listen respectfully to community educators. Park designation did not begin the human story.

ANSWER KEY 3 OF 3 AGES 4-6

People pictures and reflection

Use the activity page numbers shown below. Open drawings and family conversations have many good answers.

Page 11 Build a cactus water store

4 + 3 = 7. 5 + 2 = 7. 8 - 3 = 5. Drawings should show the requested objects in two groups.

Page 12 A desert full of shapes

Long: rabbit ears or cactus arms. Round: cactus pads, clouds or an eye. Branching: cactus arms. The rabbit is an animal; the cactus is a plant. Many color choices work.

Page 13 I spy desert shapes

Possible answers: saguaro; jackrabbit; pinnacle. New clues describe a visible shape without naming it. Shared stories vary.

Page 14 My desert discoveries

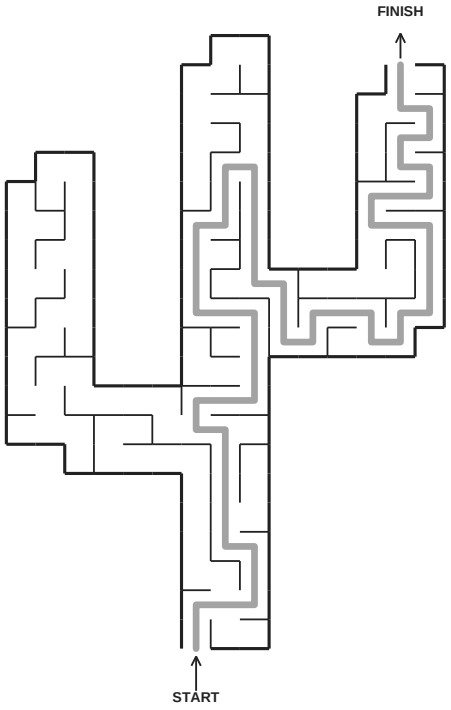
Drawings and words vary. Look for a recognizable place or clue and an explanation connected to something in the packet.

ANSWER KEY 1 OF 3 AGES 7-9

Routes and first discoveries

Try a hint first. Point to evidence in the activity before reading its answer.

Page 16 The branching cactus route



Page 15 Desert mountain city

Phoenix is farthest north; Chiricahua is farthest east. Saguaro West and East are two districts of the same park on opposite sides of Tucson.

Page 17 From ash to standing stone

D-C-A-E-B. Ash settles, becomes tuff, cracks, weathers and is carried away by erosion. Erosion is the transport step.

Page 18 A cactus feeds a community

Sun to saguaro; nectar to bat; fruit to cactus wren and coyote. Dashed links connect saguaro to nectar and fruit: the plant makes these foods. Cactus wren and coyote share fruit; the bat uses nectar.

ANSWER KEY 2 OF 3 AGES 7-9

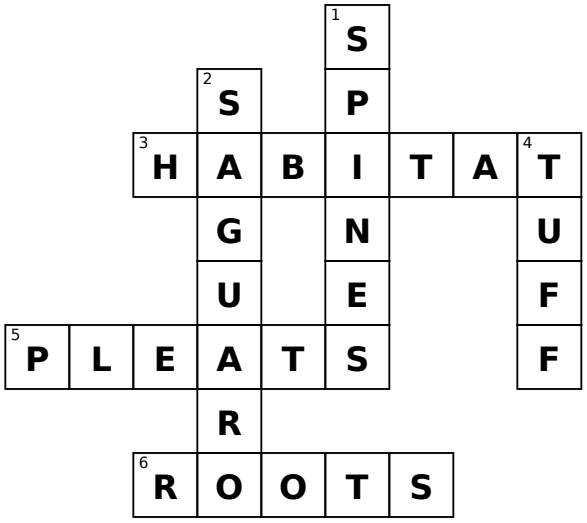
Words models and evidence

Check every crossing, calculation and clue. Several thoughtful explanations may fit the evidence.

Page 20 Find the cactus connections

Z	M	X	Q	H	P	A	F	Z	L	O	A
O	U	Z	E	A	L	Q	L	B	K	P	D
F	N	T	U	F	E	M	O	F	V	R	X
D	D	Y	Q	O	A	I	W	R	H	O	Z
Q	E	H	S	A	T	B	E	U	K	O	I
X	W	M	E	Z	N	I	R	I	A	T	C
E	S	Q	G	A	V	R	N	T	Y	V	P
X	S	P	Z	P	H	D	O	S	B	S	B
Z	J	Q	I	Y	E	N	Q	U	J	Q	J
F	Y	D	I	N	O	E	N	Y	F	T	M
O	R	G	W	W	E	O	S	E	E	D	J
B	A	T	G	B	R	C	E	D	I	K	V

Page 21 Desert toolkit crossword



Page 19 Compare places and numbers

28 - 13 = 15°C. 17 + 14 = 31 minutes. 75 - 31 = 44 minutes. The cactus is living; the rock tower is shaped by weathering and erosion.

Page 22 The missing feature labels

A pleats; B roots; C spines; D flower. B and D are fixed by water uptake and pollen; C is sharp, leaving pleats for A.

Page 20 Find the cactus connections

Plant parts: ROOT, SPINE, PLEAT. Flower to new plant: FLOWER, FRUIT, SEED. Animal visitors: BIRD, BAT.

ANSWER KEY 3 OF 3 AGES 7-9

People pictures and reflection

Use the activity page numbers shown below. Open drawings and family conversations have many good answers.

Page 23 More than dates on a timeline

1933, 1961, 1994. 1994 - 1933 = 61 years. People lived here long before these dates, and continuing Tribal relationships are not captured by a park-designation timeline.

Page 24 A cactus can be a home

The pointed bill helps a woodpecker make a cavity. An abandoned cavity can shelter a later bird. Compare the visible bill shape and opening.

Page 25 Dots and boxes on the road

There are 5 × 6 = 30 boxes. The final scores total 30. Completing a box gives another turn. Winners and memory stories depend on play.

Page 26 My evidence and memories

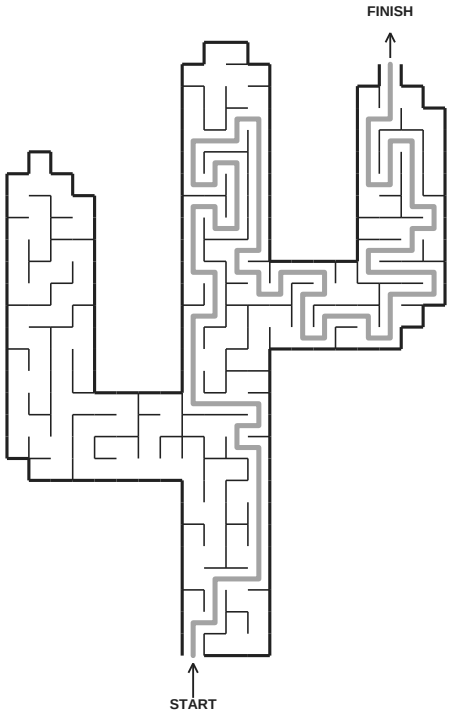
Example: “The cactus has pleats. They allow the water-storage stem to expand.” A rock-story drawing might connect a fracture to later weathering.

ANSWER KEY 1 OF 3 **AGES 10+**

Routes and first discoveries

Try a hint first. Point to evidence in the activity before reading its answer.

Page 28 The saguaro network



Page 27 Investigate a varied region

Phoenix is farthest north; Chiricahua is farthest east. Saguaro West and East are two districts of the same park on opposite sides of Tucson.

Page 29 Catch the rock story mix up

A → scene 3; B → scene 1; D → scene 2. Cross out C. The towers are rhyolite tuff, formed from volcanic ash and debris, not fossil trees.

Page 30 A cactus feeds a community

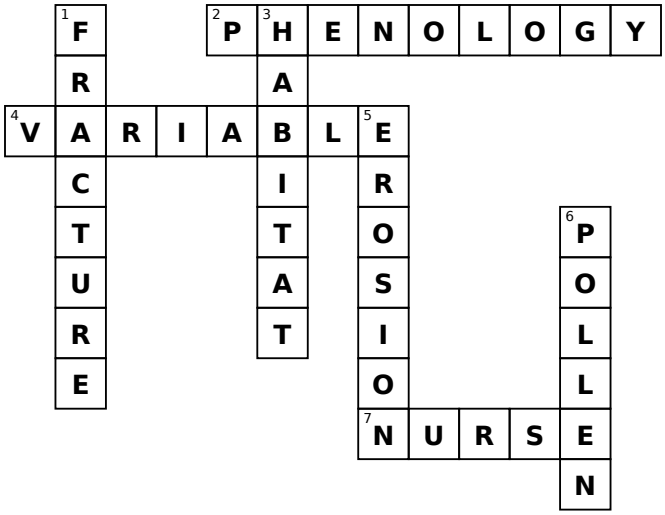
nectar to bat; fruit to cactus wren and coyote. Dashed links connect saguaro to nectar and fruit: the plant makes these foods. No. A web shows feeding links, not exact population changes. Weather, water and other foods can matter.

ANSWER KEY 2 OF 3 AGES 10+

Words models and evidence

Check every crossing, calculation and clue. Several thoughtful explanations may fit the evidence.

Page 32 Desert words connect



Page 31 Two pictures two kinds of evidence

1 A; 2 A; 3 NO. One count does not tell how many survived without an earlier count of the same seedlings. Follow matched plots repeatedly and record water, soil and shade.

Page 33 A cactus changes its water store

Round 1:9,13,10. Round 2:10,14,11. Round 3:11,15,12. Round 4:12,16,13. Round 5:13,13,10. Storage rises by 1 in rounds 1-4. It ends at 10. Without incoming rain, the daily use reduces the store by 3.

Page 34 Follow a connected route

Route A moves pollen. A bat connects the flowers; Route B moves seeds in a different way. The code reads POLLEN CONNECTS FLOWERS. Shift every coded letter back 5.

ANSWER KEY 3 OF 3 **AGES 10+**

People pictures and reflection

Use the activity page numbers shown below. Open drawings and family conversations have many good answers.

Page 37 A desert number rest stop

4	2	3	1	8	5	9	6	7
8	1	5	6	7	9	3	2	4
7	6	9	2	4	3	5	1	8
9	4	2	8	3	1	6	7	5
3	8	1	7	5	6	2	4	9
5	7	6	4	9	2	1	8	3
2	3	8	5	1	7	4	9	6
6	9	4	3	2	8	7	5	1
1	5	7	9	6	4	8	3	2

Page 35 The exhibit labels got mixed

A → 2; B → 3; C → 1. Best headline: A LONG PAST AND CONTINUING CONNECTIONS. Park designation is one event within a much longer human story.

Page 36 Trace the making of a pinnacle

Mark a visible crack as fracture, a constricted section as neck and a wider support as base. Water can enter cracks; erosion transports loosened material.

Page 37 A desert number rest stop

The completed grid is shown. Each row, column and bold box contains 1-9 exactly once. This puzzle has one solution, verified by exhaustive search.

Page 38 Make a discovery worth sharing

Share two details that support the chosen discovery. Drawing or talking can carry the explanation.

FOR THE GROWN-UPS FAMILY GUIDE

Before you head outside

Use the book on the drive, at a safe stop or after a visit. Choose places where children can sit and attend to their surroundings.

DESERT AND MOUNTAIN STOPS

Carry drinking water, plan for heat and changing weather, and follow current park advice. Stay on designated routes. Look at cacti without touching; keep wildlife wild and leave natural objects in place.

DIFFERENT SETTINGS

Saguaro has two districts around Tucson. Chiricahua lies farther east. Phoenix is the northern baseball stop in this journey. Use official maps and current access information to plan travel.

PEOPLE AND PLACES

Respect Tribal and park rules. Learn from community educators and named sources. A seasonal practice may have meanings beyond the short summary in this activity book.

Saguaro planning: https://www.nps.gov/sagu/planyourvisit/

Chiricahua planning: https://www.nps.gov/chir/planyourvisit/

Baseball schedules and visitor information:

https://www.mlb.com/dbacks/ballpark

Separate packets: activities 1-12, answers 13-15 and shared guidance/sources 16-18. Print at actual size on US Letter.

Sources for curious families

Official park, community and baseball sources support the discoveries. All activities can be completed with this printed packet.

Cactus pleats, roots, spines and nighttime pores

https://www.nps.gov/sagu/learn/nature/cacti-and-desert-succulents.htm

Nurse trees, cactus cavities and pollination

https://www.nps.gov/sagu/learn/nature/saguaro.htm

Flower timing and the Tohono O’odham harvest

https://www.nps.gov/sagu/getinvolved/saguaro-flower-power-project.htm

Chiricahua rock formation

https://www.nps.gov/chir/learn/nature/geologicformations.htm

Sky islands and changing habitats

https://www.nps.gov/chir/learn/nature/sky-islands.htm

Fort Sill Apache Tribe | community history

https://fortsillapache-nsn.gov/history-and-traditional-culture/history/

Chiricahua current designation and Apache homeland

https://www.nps.gov/chir/

Original artwork retained; the older landscape has a detailed naturalistic variant. New diagrams are editable vectors. Reviewed October 2026.

Sources for curious families

Official park, community and baseball sources support the discoveries. All activities can be completed with this printed packet.

Saguaro districts and visitor-area geography

https://www.nps.gov/sagu/planyourvisit/directionsandtransportation.htm

Chase Field | Arizona Diamondbacks

https://www.mlb.com/dbacks/ballpark

Baseball scoring | Major League Baseball

https://www.mlb.com/glossary/standard-stats/run

Coati foods and range

https://nationalzoo.si.edu/animals/white-nosed-coati

Saguaro designation timeline

https://www.nps.gov/sagu/learn/historyculture/index.htm

Original artwork retained; the older landscape has a detailed naturalistic variant. New diagrams are editable vectors. Reviewed October 2026.