

ROOTOSAUR

THE NUMBERS BOOK



**Every word is a machine.
This one is full of numbers.**

FREE • BOOK ZERO • AGES 5 TO 7

ROOTOSAUR

THE NUMBERS BOOK

Book Zero · First edition, 2026 · Ages 5–7
by Owen Conflenti · rootosaur.com

This book is free.

Copy it, print it, hand it around — at home, in a classroom, in a library, anywhere kids are pulling words apart. You never need to pay for it and you never need to ask.

Two small favors: please keep it **whole**, and keep our name on it. Please don't sell it, and don't chop it into something else.

SHARE — DON'T SELL — KEEP IT WHOLE

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FOR THE GROWN-UP

How to use this book

Twelve number parts, one per chapter, and a mystery in the middle.

Each chapter is five pages and about ten minutes. One chapter a night is the right pace — this is a book to be done slowly, not read in one go.

The child does almost no writing. Everything is circle it, tick it, count it, draw it, because at this age handwriting is the bottleneck and thinking is not.

Answer keys are printed upside down at the bottom of each Your Turn page — easy for you to check at a glance, mildly annoying for a child to peek at, which is about right.

The last page of every chapter is a drawing. It is not a reward for finishing the work. It is the work. Invented creatures are how a five-year-old proves they understood.

Who reads it. For a five-year-old this is read-aloud level, so read it together. A strong seven-year-old can take it on alone. Where a page asks the child to write a word — “my uni-creature has one ____” — a grown-up can write it for them. Saying it is the point, not spelling it.

Printing. Printing one chapter at a time for your class is absolutely fine. The twelve cut-out cards are also gathered on a single sheet at the back, so you can run that one page on cardstock and leave the chapter worksheets whole.

ONE THING WORTH KNOWING

Chapters 7 to 10 set up a mystery on purpose — four months of the year have the wrong numbers in their names. Chapter 11 solves it. If your child spots it before chapter 11, that is the whole book working exactly as intended.

Two parts to watch. **NON** means ninth only in number words — everywhere else in English it means *not* (nonstop, nonsense). And **NOV** usually means *new* (novel, novice), not nine. Chapter 9 flags both.

START HERE

Every word is a machine. And machines come apart.

Here is one you have known since you were three.

$$\boxed{\text{DINO}} + \boxed{\text{SAUR}} = \underline{\text{DINOSAUR}}$$

DINO means terrible. **SAUR** means lizard.

Dinosaur means **terrible**
lizard.



You have been saying *terrible lizard* your whole life and nobody told you.

And here is the first catch. A dinosaur was not a lizard at all. The man who invented the name in 1842 got that part wrong. Get used to it — this book is full of names that are a little bit wrong.

THAT IS WHAT THIS BOOK DOES

It takes words apart and shows you what was inside them all along. We are going to start with the easiest pieces there are — numbers — because you can always check a number. You just count.

TWELVE PIECES

Twelve pieces to collect.

One at the end of every chapter. Cut them out and keep them somewhere safe.



Each one is a number hiding inside words. Once you have a piece, you keep it forever, and you start finding it everywhere — on signs, in books, in the names of animals, in the months of the year.

HOW EACH CHAPTER GOES

- 1 SAY IT** — say the part out loud.
- 2 COUNT IT** — circle the right picture.
- 3 YES OR NO** — quick questions.
- 4 WORK IT OUT** — a brand new word you solve on your own.
- 5 DRAW IT** — invent something nobody has ever seen.

Ready? Turn the page.

We start at one.

A NUMBER IS HIDING IN HERE

UNI

UNI means ONE.



One. Just one — when UNI is a word part.

1

Just one. That is the whole idea.

IMPOSTER! Rooty sniffed out a fake.**PUNISH**There is **UNI** sitting right in the middle of **punish**. But a punishment is not **one** of anything. The letters turned up by accident. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

UNI corn **UNI** cycle **UNI** form

Three words you have heard before. It has been sitting inside all of them the whole time.

Turn the page and we will take them apart.

1

SAY IT Out loud. Your mouth remembers things your eyes forget.Say **UNI**. It sounds like **YOU-nee**.

Say it three times. Tick one box each time you say it.

☐ ☐ ☐

You already know some UNI words.

You just never took one apart before. Watch.



UNI + **CORN** = **UNICORN**

UNI means one. **CORN** is an old word for **horn**.

A unicorn is a **one-horn**. That is the whole name.

One catch: nobody has ever found one. The name still works — and there is a real one-horned animal wearing it. The Indian rhinoceros is called *Rhinoceros unicornis*.

UNI + **CYCLE** = **UNICYCLE**

UNI means one. **CYCLE** means **wheel**.

One wheel. That is why it is so hard to ride.



MORE WORDS WITH UNI IN THEM

unit **uni**que **uni**te

unit one single thing · unique one of a kind · unite make into one

Two words. One little part. No memorizing.

You did not learn two things just now. You learned **one** — and the others came free.

A uniform is not really about clothes.

Look at the word. **UNI** means one. **FORM** means *shape*.

So a uniform means everybody wearing one shape.

That is all it has ever meant. A whole school, all one form. A whole team, all one form. Somebody looked at a room full of kids dressed the same and said **one shape**, and the word stuck.

ONE SHAPE, OVER AND OVER

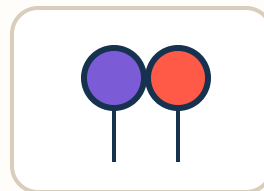


Same shape. Same shape. Same shape. That is a uniform.

SAY IT OUT LOUD

UNI-FORM. One shape. Now you will never forget it.

2



3

NO

NO

NO

NO

NO

4

I
write it
here

ANSWER KEY (turn the page upside down) — COUNT IT: the one with 1. YES OR NO: yes · no · yes · no · yes · no · yes · no · yes · WORK IT OUT: 1.

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN

No. 1 of 12

UNI**= ONE**Greek twin: **MONO** — as in monorail.**unicorn** one horn · **unicycle** one wheel**uniform** one shape · **unison** one sound

1

DRAW IT: Invent a UNI-CREATURE. It has ONE of something. You pick what.

My uni-creature has one _____

**I unlocked UNI.**

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — BI. It means two. It is hiding in your bicycle, and in something you look through to see far away.

A NUMBER IS HIDING IN HERE

BI

BI means TWO.



Two. Always two — when BI is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**BIRD**

It starts with **BI**... but a bird is not **two** of anything. Same for **big** and **bite**. The letters are there. The meaning is not. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

BI cycle **BI** noculars **BI** plane

Three words you have heard before. It has been sitting inside all of them the whole time.
Turn the page and we will take them apart.

1

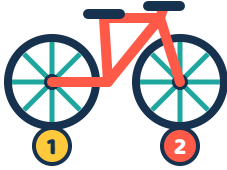
SAY IT Out loud. Your mouth remembers things your eyes forget.Say **BI**. It sounds like **BY**.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some BI words.

You just never took one apart before. Watch.



$$\text{BI} + \text{CYCLE} = \text{BICYCLE}$$

BI means two. **CYCLE** means *wheel*.

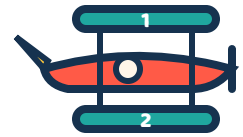
Two wheels. You already knew that. Now you know **why**.

One number apart. A unicycle has one wheel. A bicycle has two. Same ending, one number apart.

$$\text{BI} + \text{PLANE} = \text{BIPLANE}$$

BI means two.

An old airplane with **two sets of wings**, stacked one on top of the other.



MORE WORDS WITH BI IN THEM

bilingual **bisect** **biceps**

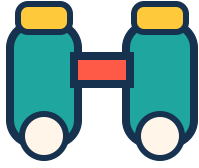
two languages cut into two two heads — feel your arm

Two words. One little part. No memorizing.

You did not learn two things just now. You learned **one** — and the others came free.

Binoculars are two eyes.

BI means two. **OCULAR** means **eye**. That is why binoculars have two tubes. One for each eye.



BI + **OCULAR** = **BINOCULARS**

Two eyes, two tubes. (That **n** is not spare. **BIN** is **BI**'s bigger cousin — it means **a pair**. A pair of eyes.)

ONE EYE, OR TWO?



A telescope has **ONE** tube.
You look with one eye.



Binoculars have **TWO** tubes.
One for each eye.

Nobody was being clever. They just said what it was.

A WORD YOU NOW OWN

OCULAR means **eye**. You will meet it again when you are older, and you will already know it.

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN

No. 2 of 12

BI**= TWO**

Greek twin: DI.

bicycle two wheels · **binoculars** two eyes**biplane** two wings · **biped** two feet**2**

DRAW IT: Invent a BI-CREATURE. It has TWO of something strange. You decide what.

My bi-creature has two _____

**I unlocked BI.**

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — TRI. It means three. It is hiding in a shape, a bike, and one of the most famous dinosaurs there is.

A NUMBER IS HIDING IN HERE

TRI

TRI means THREE.



Three — when TRI is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**TRICK**

It starts with TRI... but a trick is not **three** of anything. Nor is a **trip**. Watch out for those two.
Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

TRI angle

TRI cycle

TRI ceratops

Three words you have heard before. It has been sitting inside all of them the whole time.

Turn the page and we will take them apart.

1

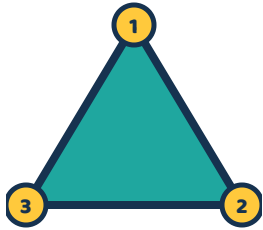
SAY IT Out loud. Your mouth remembers things your eyes forget.Say **TRI**. It sounds like TRY.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some TRI words.

You just never took one apart before. Watch.



$$\text{TRI} + \text{ANGLE} = \text{TRIANGLE}$$

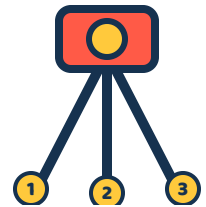
TRI means three. **ANGLE** means corner.

A triangle is a **three-corner**. Count them on the picture.

$$\text{TRI} + \text{POD} = \text{TRIPOD}$$

TRI means three. **POD** means foot.

A tripod has **three feet**. Three feet always touch the ground at once, so a camera one never rocks. A four-legged table can rock. A three-legged stool cannot.



MORE WORDS WITH TRI IN THEM

TRIo

three players

TRIple

three times

TRIdent

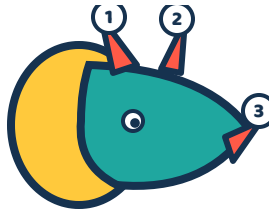
three teeth

Two words. One little part. No memorizing.

You did not learn two things just now. You learned **one** — and the others came free.

Triceratops means three-horn-face.

This one comes apart into **three** pieces, not two.



$$\text{TRI} + \text{CERAT} + \text{OPS} = \text{TRICERATOPS}$$

TRI = three. **CERAT** = horn. **OPS** = face.

Three. Horn. Face. Go and look at a picture of one and count the horns. There will be three.

They got it wrong the first time. The very first Triceratops horns anyone dug up were labelled as a giant **bison**. The right name only turned up on the second try.

A real name for a real thing. Somebody dug up that skull, counted the horns, and named it exactly what it was.

THE BEST PART

You just took apart a word with **three pieces** in it. Most grown-ups have never done that.

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN + GREEK

No. 3 of 12

TRI**= THREE**

Rome and Greece spell this one the same.

triangle three corners · **tricycle** three wheels · **tripod** three feet**triceratops** three-horn-face**DRAW IT:** Invent a TRI-CREATURE. It has THREE of something.

My tri-creature has three _____

**I unlocked TRI.**

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — QUAD. It means four. Your dog is one. You are not.

A NUMBER IS HIDING IN HERE

QUAD

QUAD means FOUR.



Four. Always four — when QUAD is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.

QUARREL

It starts like **QUAR**... but a quarrel is an argument, not a **fourth** of anything. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

QUADruped **QUAD**bike **QUAR**ter

Three words you have heard before. It has been sitting inside all of them the whole time.

Turn the page and we will take them apart.

1

SAY IT Out loud. Yes, really out loud — your mouth remembers things your eyes forget.

Say **QUAD**. It sounds like KWOD.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some QUAD words.

You just never took one apart before. Watch this.

QUAD

+

PED

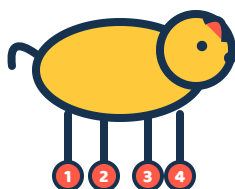
=

QUADRUPED

QUAD means four. **PED** is an old word for **foot**.

A quadruped walks on **four feet**. A dog is one. So is a cat, a horse and a cow. (QUADRU is QUAD in a longer coat. Still four.)

Remember BIPED from chapter 2? Two feet — that is you. Four feet is your dog. Same ending, different number.



ROOTY'S FOOT FILE

You have met **feet** twice now, spelled two different ways. Here is why.

PED • PEDE the **Roman** foot — **biped**, **quadruped**, **centipede**, **millipede**

POD • PUS the **Greek** foot — **tripod**, **hexapod**, **octopus**, **decapod**

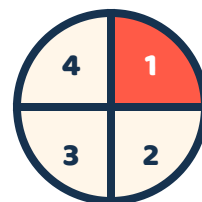
Same foot, two languages. Rome said PED, Greece said POD, and English kept **both**. Check the bottom of your cards: some parts are Roman, some are Greek.

QUAR

 hiding inside **QUARTER**

Quarter hides the four right inside it. A quarter is **one piece out of four**. Cut a sandwich into four and you have quarters. (The QUAD softens to QUAR here, but the four never leaves.)

Count them on a clock. A quarter past, half past, quarter to — the hour is being cut into four. Four quarters make one whole.



MORE WORDS WITH QUAD IN THEM

quadrangle

four corners

quadrant

one of four parts

quad bike

four wheels

Two words. One little part. No memorizing.

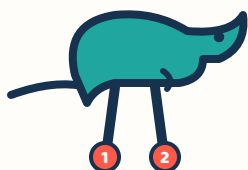
You did not learn two things just now. You learned **one** — and the others came free.

A T-rex was not a quadruped.

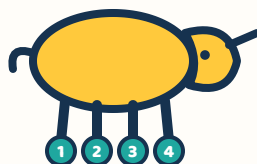
Count the legs a T-rex walked on. **Two**. Its little arms never touched the ground. So a T-rex was a **biped**, like you.

A Triceratops walked on four legs.

So it was a **quadruped**, like a cow. Two dinosaurs, standing right next to each other, in two different groups — and you can now sort every animal you meet into one or the other just by counting.



T-REX • 2 LEGS • BIPED



TRICERATOPS • 4 LEGS • QUADRUPED

TRY IT ON EVERYTHING

Bird? Two — a biped. **Spider?** Neither — wait until chapter 8. **Horse?** Four — a quadruped. Once you can count legs, you can sort lots of animals this way.



TWO GROUPS, ONE COUNT.

Biped or quadruped. From now on, every creature you see belongs in one of the two — and all you have to do is count the legs on the ground.

got it

Cut this card out along the dashed line and keep it. There are **12** of them in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN

No. 4 of 12

QUAD**= FOUR**Greek twin: **TETRA**.**quadruped** four feet · **quadruplets** four babies**quarter** one of four · **quadrangle** four corners**quad bike** four wheels

4

DRAW IT: Invent a QUAD-CREATURE. It has FOUR of something. You decide what.

My quad-creature has four _____

I unlocked QUAD.

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — PENTA. It means five. There is a very large building named after it — a giant one with five sides. Turn the page and go find it.

A NUMBER IS HIDING IN HERE

PENTA

PENTA means FIVE.



Five — when PENTA is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**SERPENT**There is a **PENT** hiding in **serpent**. But a serpent is a snake. It has no **five** in it at all. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

PENTA gon

PENTA gonal

Two words you have heard before. It has been sitting inside all of them the whole time.

Turn the page and we will take them apart.

1

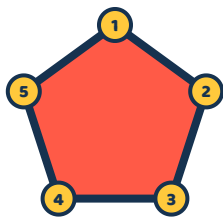
SAY IT *Out loud. Your mouth remembers things your eyes forget.*Say **PENTA**. It sounds like **PEN-ta**.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some PENTA words.

You just never took one apart before. Watch.



$$\text{PENTA} + \text{GON} = \text{PENTAGON}$$

PENTA means five. **GON** means corner.

A pentagon is a **five-corner**. Count them — there will be five.

FIVE POINTS, ONE PENCIL LINE

The **five-pointed star** is the one you can draw without lifting your pencil off the paper. Try it. Then count the points — there will be five. A starfish has five arms for exactly the same reason: five is its number.



MORE WORDS WITH PENTA IN THEM

pentagon the five-sided building · **pentagonal** five-sided · **pentathlete** does five sports

Two words. One little part. No memorizing.

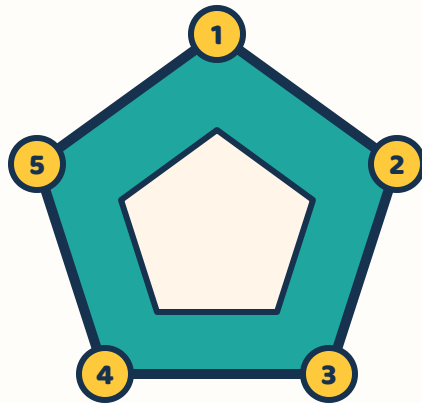
You did not learn two things just now. You learned **one** — and the others came free.

There is a building called the Pentagon.

It is one of the biggest office buildings in the whole world, and it is in America.

Why is it called that? Because it has five sides.

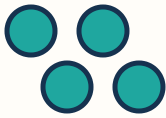
Look down at it from above and it is a **pentagon**. That is the whole reason. Somebody built a five-sided building, then called it “five-sided building” in Greek, and everyone went along with it.



YOU CAN CHECK THIS

Ask a grown-up to show you a picture of the Pentagon from above. Then count the sides. There will be five. There are always five.

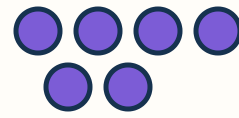
2 COUNT IT Circle the picture that has five.



A



B



C

3 YES OR NO Quick — do not look back. Circle your answer.

Does a **pentagon** have five corners?

YES

NO

Does the **Pentagon** building have five sides?

YES

NO

Do you have **five** fingers on one hand?

YES

NO

Does **PENTA** mean two?

YES

NO

Do you have five fingers on one hand?

YES

NO

4 WORK IT OUT A word you have never seen. You do not need help. You have got the piece.

PENTATHLON

A **pentathlon** is a contest where you have to be good at lots of different sports. **How many sports do you think are in it?**

That is the whole trick.

You just knew a word you had never met, because you knew one little piece of it.

write it
here

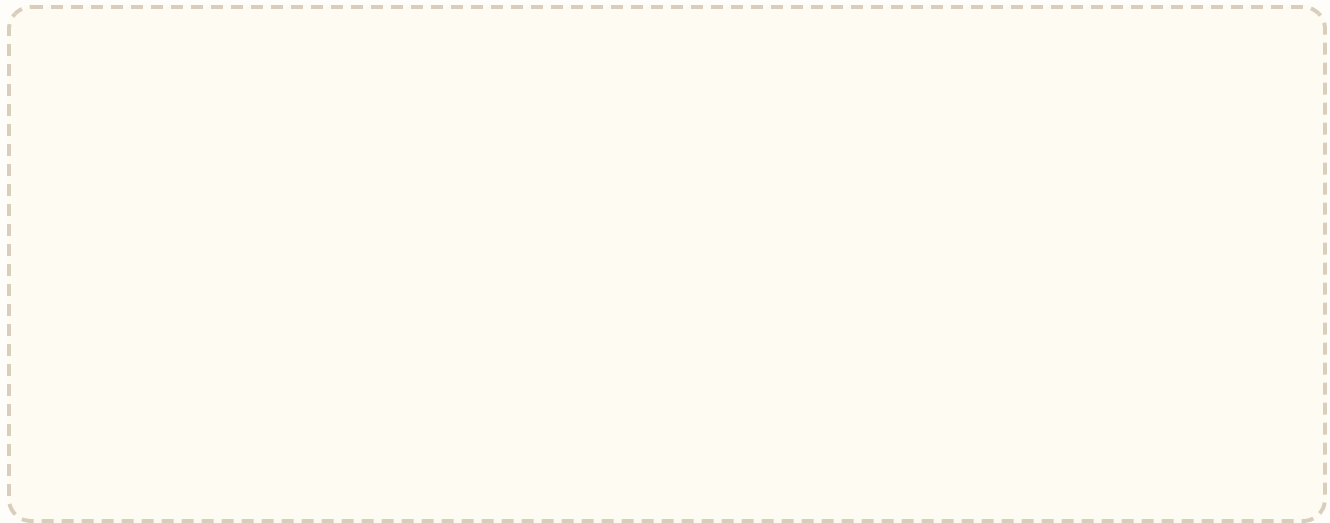
ANSWER KEY (turn the page upside down) — COUNT IT: B, the one with 5. YES OR NO: yes · yes · yes · no · yes. WORK IT OUT: 5.

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

GREEK

No. 5 of 12

PENTA**= FIVE**Roman twin: **QUINT** — as in quintuplets, five babies.**pentagon** five corners · **pentagonal** five-sided**pentathlon** five sports**DRAW IT:** Invent a PENTA-CREATURE. It has FIVE of something. You decide what.

My penta-creature has five _____

I unlocked PENTA.

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — HEXA. It means six. Honeybees know this one and nobody taught them.

A NUMBER IS HIDING IN HERE

HEXA

HEXA means SIX.



Six — when HEXA is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**HEX**

A **hex** is a magic spell in a story. It looks like the start of **HEXA**, but it has nothing to do with **six**. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

HEXAgon**HEXA**pod**HEXA**gonal

Three words you have heard before. It has been sitting inside all of them the whole time.
Turn the page and we will take them apart.

1

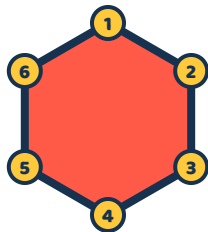
SAY IT Out loud. Your mouth remembers things your eyes forget.Say **HEXA**. It sounds like **HEX-a**.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some HEXA words.

You just never took one apart before. Watch.



HEXA + **GON** = **HEXAGON**

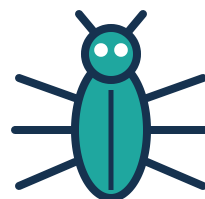
HEXA means six. **GON** means corner.

A hexagon is a **six-corner**. Count the corners on this one. There will be six. There are always six.

HEXA + **POD** = **HEXAPOD**

POD means foot. A hexapod has **six feet**. Every insect in the world is a hexapod.

Here is a trick you can use forever: count the legs. Six legs means it is an insect. Eight legs means it is not.



MORE WORDS WITH HEXA IN THEM

hexa **hedron**

six flat faces — a cube!

hexa **gonal**

six-sided

hexa **pod**

six feet — every insect

Two words. One little part. No memorizing.

You did not learn two things just now. You learned **one** — and the others came free.

Honeybees build in sixes and nobody taught them.

Look inside a honeycomb. Every single little room is a **hexagon**. Six sides, every time, in every honeybee hive, everywhere in the world. (Bumblebees do not — they make little round pots.)



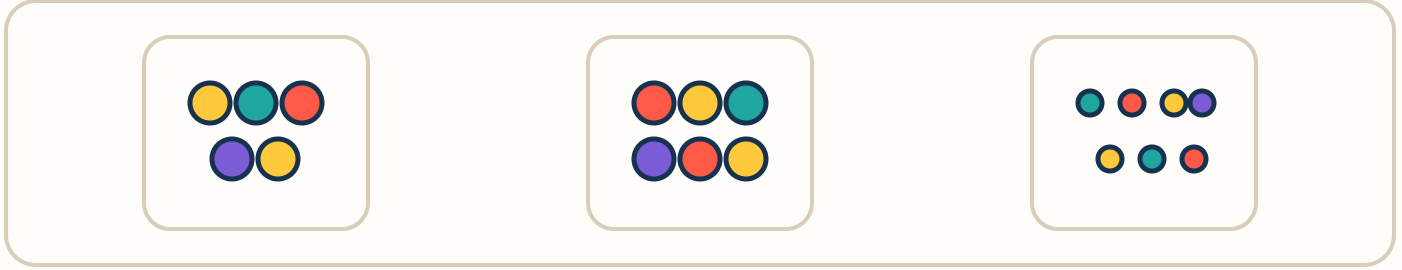
No bee has ever been to school. They just do it.

It turns out six-sided rooms fit together with **no gaps** and use the **least wax**. The bees worked that out before people did.

GO AND LOOK

Honey jars often have a honeycomb picture on the label. Count the sides of one little room. There will be six. There are always six.

2 COUNT IT Circle the picture that has six.



3 YES OR NO Quick — do not look back. Circle your answer.

Does a hexagon have six corners?	☐ YES	☐ NO
Are honeycomb rooms hexagons?	☐ YES	☐ NO
Does an insect have six legs?	☐ YES	☐ NO
Does HEXA mean ten?	☐ YES	☐ NO
Did somebody teach the bees ?	☐ YES	☐ NO

4 WORK IT OUT A word you have never seen. You do not need help. You have got the piece.

HEXA GRAM

A **hexagram** is a star too. You met the five-pointed one in chapter 5. This one starts with **HEXA**. **How many points?**

That is the whole trick.

You knew a word you had never met, because you knew one little piece of it.

write it
here

ANSWER KEY (turn the page upside down) — COUNT IT: the one with 6. YES OR NO: yes · yes · yes · no · no. WORK IT OUT: 6.

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

GREEK

No. 6 of 12

HEXA**= SIX**The Roman six is hiding in **sextet**.**hexagon** six corners · **hexapod** six feet**hexahedron** six flat faces

DRAW IT: Invent a HEXA-CREATURE. It has SIX of something. Maybe six legs, like an insect.

My hexa-creature has six _____

**I unlocked HEXA.**

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — SEPT. It means seven. And here is where something starts to go wrong.

A NUMBER IS HIDING IN HERE

SEPT

SEPT means SEVEN.



Seven — when SEPT is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**SEPTIC**Septic means rotten — it is what a septic tank is for. Nothing to do with **seven**. Always ask what it means.

LOOK — IT IS HIDING IN WORDS YOU KNOW

SEPTember

SEPTet

SEPTuple

Three words you have heard before. It has been sitting inside all of them the whole time.

Turn the page and we will take them apart.

1

SAY IT Out loud. Your mouth remembers things your eyes forget.Say **SEPT**. It sounds like the start of **September**.

Say it three times. Tick one box each time you say it.

☐ ☐ ☐

You already know some SEPT words.

You just never took one apart before. Watch this.



$$\text{SEPT} + \text{ET} = \text{SEPTET}$$

SEPT means seven. **ET** means a little **group** that plays together.

A septet is a band with **seven players** in it. Seven people, one song.

The whole musical family does this. A duet is two, a quartet is four, a sextet is six — and a septet is seven. The number is always sitting right at the front.

MORE WORDS WITH SEPT IN THEM

SEPTember — the **seventh** month... once. (Hold that thought.)

SEPTuple — **seven times** as much.

Two words. One little part. No memorizing.

You didn't learn two things just now. You learned **one** — and the others came free.

Wait. Something is wrong with September.

SEPT means seven. You just learned that, and it is true **everywhere else**. So September should be month number **seven**.

GO AND LOOK AT A REAL CALENDAR — count the months

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	2	3	4	5	6	7	8	9	10	11	12

September is month number **NINE**.

Not seven. **Nine**. Go and check for yourself. Count the months on a real calendar. SEPT is sitting right there on the front of the word, but the month lands on **nine**.

REMEMBER THIS

September **should** be 7. It is **9**. Hold that thought. Do not forget it. Something is going on here, and we are going to catch it. Keep reading.

Three sets of colored circles are shown, each labeled with a letter below it:

- A:** Five circles arranged in two rows. The top row has three circles (yellow, teal, red) and the bottom row has two circles (purple, yellow).
- B:** Seven circles arranged in two rows. The top row has three circles (red, teal, yellow) and the bottom row has four circles (teal, red, yellow, purple). The purple circle in the bottom row is slightly offset to the right.
- C:** Six circles arranged in two rows. The top row has three circles (purple, yellow, teal) and the bottom row has three circles (red, purple, yellow).

Does SEPT mean seven?	☐	☐
Is September month number seven?	☐	☐
Does a septet have seven players?	☐	☐
Is something strange going on?	☐	☐
Should we keep reading ?	☐	☐

SEPTUPLETS You did **TRIPLETS** and **QUADRUPLETS** already. Now — **SEPTUPLETS**. How many babies?

That is the whole trick.

You knew a word you had never met, because you knew one little piece of it. There are thousands more words waiting for you exactly like that one.

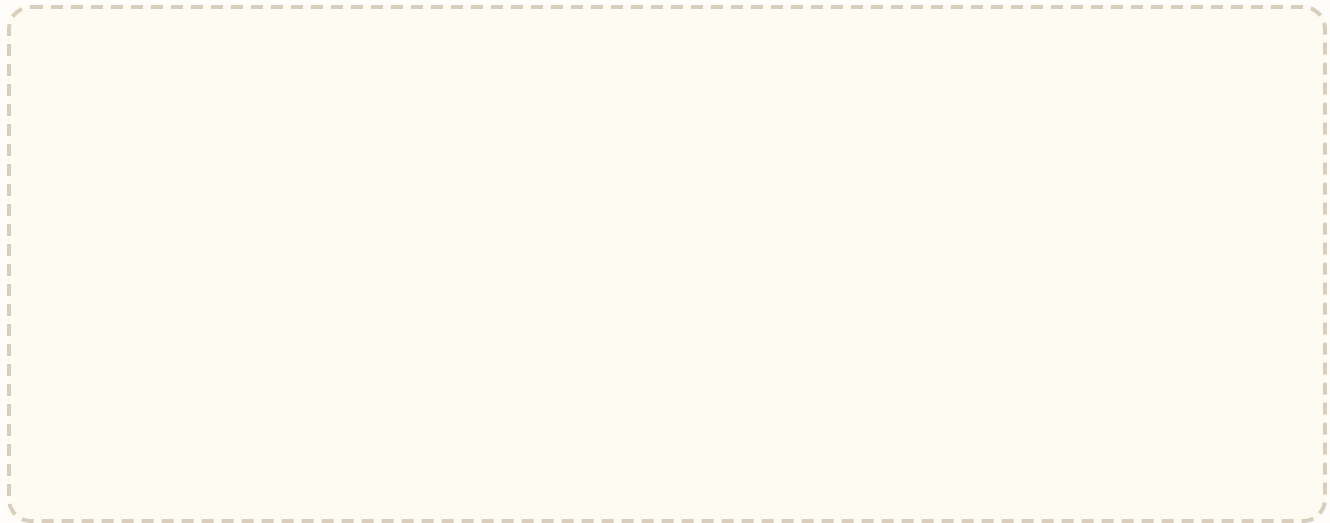
ANSWER KEY (turn the page upside down) — COUNT IT: the one with 7 (picture B), YES OR NO: yes · no · yes · yes · yes · yes · yes · WORK IT OUT: 7.

Cut this card out along the dashed line and keep it. There are **12** of them in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN

No. 7 of 12

SEPT**= SEVEN**Greek twin: **HEPTA** — that is why it is a heptagon, not a septagon.**September** the seventh month... once · **septet** seven players**septuplets** seven babies · **septuple** seven times**DRAW IT:** Invent a SEPT-CREATURE. It has seven of something. You decide what.

My sept-creature has seven _____

**I unlocked SEPT.**

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — CHAPTER 8: OCT. It means eight. And October is about to be wrong too — the very next month wearing the wrong number. Keep hold of that thought about September.

THIS ONE IS HIDING IN A LOT OF WORDS

OCT

OCT means EIGHT.



Eight. Always eight — when OCT is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**DOCTOR**Look in the middle: **doctor**. There is OCT, right there. But a doctor is not **eight** of anything. Always ask what it **means**.

HERE IS OCT HIDING IN PLAIN SIGHT

OCTopus OCTagon OCTober

Three words you already know. It has been sitting in all of them your whole life.

Turn the page and we will take them apart.

1

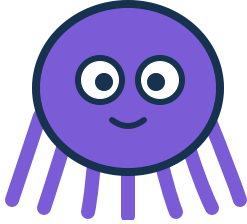
SAY IT Out loud. Yes, really out loud — your mouth remembers things your eyes forget.Say **OCT**. It rhymes with **socked**.

Say it three times. Tick one box each time you say it.

☐ ☐ ☐

You already know some OCT words.

You just never took one apart before. Watch this.



$$\text{OCT} + \text{PUS} = \text{OCTOPUS}$$

OCT means eight. **PUS** is an old Greek word for *foot*.

An octopus is an **eight-foot**. That is literally its entire name.

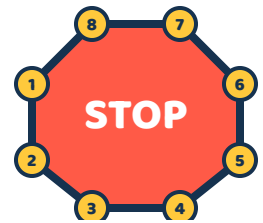
Fair warning: scientists say an octopus has eight *arms*, not feet. The ancient Greeks named it from a long way away, and nobody has fixed it since.

$$\text{OCT} + \text{GON} = \text{OCTAGON}$$

OCT means eight. **GON** means *corner*.

An octagon is a shape with **eight corners**. (The little *a* in octagon is just glue — a joining sound between the two pieces.)

You have seen a giant one today. Almost every stop sign in the world is an octagon. (In Japan they are triangles — count those corners too!) Count the corners next time you are in the car. There will be eight. There are always eight.



$$\text{OCT} \text{ hiding inside } \text{OCTAVE}$$



This one is **not** two pieces bolted together. **Octave** is one solid word that just *means* "an eighth" — but the **OCT** is still right there in front. An octave on a piano is **eight notes**: do-re-mi-fa-so-la-ti-do. Count them. Eight.

Not always two parts. Sometimes the number is baked into a word whole, instead of snapped on like a tile. The eight is still hiding in there — you just have to look.

$$\text{OCT} + \text{UPLETS} = \text{OCTUPLETS}$$

Eight babies. Same day. Same mom. **Eight of them.**



Four words. One little part. Zero memorizing.

You didn't learn four definitions just now. You learned **one** — and the other three came free.

Wait a second. OCTOBER has OCT in it.

But October is month number **TEN**. Not eight. **Ten**. OCT is sitting right there on the front of the word, and the month lands on ten.

THE CALENDAR WE USE TODAY — count along to October

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	2	3	4	5	6	7	8	9	10	11	12

OCT wears an EIGHT — but stands in spot TEN.

THE COUNT SO FAR

September: 7 → 9. **October:** 8 → 10. That is **two in a row** now — and both of them are out by exactly the same amount. Two.



REMEMBER THIS

October should be 8. It is 10. Two in a row, both wrong by two. Hold on to that. There are two more months coming, and then we are going to catch this thing.

I
got it

2 MATCH IT Draw a line from each word to the right picture.

OCTAGON

OCTOPUS

OCTUPLETS







3 YES OR NO Quick — don't look back. Circle your answer.

Does an **octopus** have eight arms?

YESNO

Does an **octagon** have three corners?

YESNO

Was **October** once the eighth month?

YESNO

Does a **bicycle** have eight wheels?

YESNO

If a mom has **octuplets**, is her house loud?

YESNO

4 WORK IT OUT A word you have never seen. You don't need help. You've got the piece.

OCTET

An **octet** is a group of singers who sing together. You have never seen this word in your life. Doesn't matter. **How many singers are in an octet?**
That right there is the whole trick.
You just knew a word you had never met, because you knew one little piece of it. There are thousands more words waiting for you exactly like that one.

write the number

ANSWER KEY (turn the page upside down) — MATCH IT: octagon → the stop sign • octopus → the octopus • octuplets → the eight dots. YES/NO: yes • no • yes • no • yes • no • yes • no • yes. WORK IT OUT: 8.

Cut this card out along the dashed line and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN + GREEK

No. 8 of 12

OCT**= EIGHT**

Rome and Greece spell this one the same.

octopus eight-foot · **octagon** eight corners · **octave** eight notes**octuplets** eight babies · **octet** eight singers**October** the month with the wrong name

DRAW IT: Invent an OCT-CREATURE. It has EIGHT of something strange. You decide what.



My oct-creature has eight _____

I unlocked OCT.



Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — CHAPTER 9: NOV. It means nine. It's hiding in November — the very next month wearing the wrong number — and in a shape with nine corners. Two months down in the great calendar mix-up. Two to go.

A NUMBER IS HIDING IN HERE

NOV

NOV means NINE.



Nine — when NOV is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**NOVEL**

A **novel** is a book. NOV here means **new**, not nine. That is the one that catches people out most. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

NOVember

NONagon

NONet

Three words you have heard before. It has been sitting inside all of them the whole time.
Turn the page and we will take them apart.

1

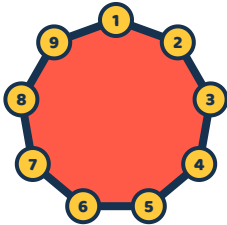
SAY IT Out loud. Your mouth remembers things your eyes forget.Say **NOV**. It sounds like the start of **November**.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some NOV words.

You just never took one apart before. Watch.

**NON**

+

GON

=

NONAGON

NON means nine. **GON** means corner.

A nonagon is a shape with **nine corners**.

Careful — **NON** has a job to watch. NOV has a twin, **NON**, that also means ninth. But most of the time in English, **NON** means **NOT** — nonstop, nonsense, nonfiction. Only in number words does it mean nine.

Count them on the picture. Nine. Go all the way around the shape and there are always nine corners waiting for you.

NONhiding inside **NONET**

The **NON** is sitting right there in front. A **nonet** is a band with **nine players**.

Count up: septet was seven, octet was eight, nonet is nine. Each one is just a number with a band wrapped around it.



MORE WORDS WITH NOV IN THEM

**NOV**ember

the ninth month... once.

Two words. One little part. No memorizing.

You did not learn two things just now. You learned **one** — and the others came free.

You already know what November is going to do.

NOV means nine. So November should be month number **nine**. You have probably guessed already.

November is month number ELEVEN.

Wrong by two. Again. That is three months in a row now, all wrong, all wrong by exactly two.

THE CALENDAR WE USE TODAY — the year starts in January

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	2	3	4	5	6	7	8	9	10	11	12

NOV wears a NINE — but stands in spot ELEVEN.

THE COUNT SO FAR

September: 7 → 9. October: 8 → 10. November: 9 → 11. Every one out by two.



ONE MORE IS COMING.

There is one more month wearing the wrong number — DEC — and then we are going to solve this whole thing. Three down. One to go.

<

Does NOV mean nine?	☐ YES	☐ NO
Is November month number nine?	☐ YES	☐ NO
Is November wrong by two, like the others?	☐ YES	☐ NO
Does a nonet have nine players?	☐ YES	☐ NO
Can you guess what December is going to do?	☐ YES	☐ NO

NONUPLETS Triplets, quadruplets, septuplets... **NONUPLETS**. You have never seen this word before. Doesn't matter. **How many babies?**
That is the whole trick.
You just knew a word you had never met, because you knew one little piece of it.

[illegible]

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN

No. 9 of 12

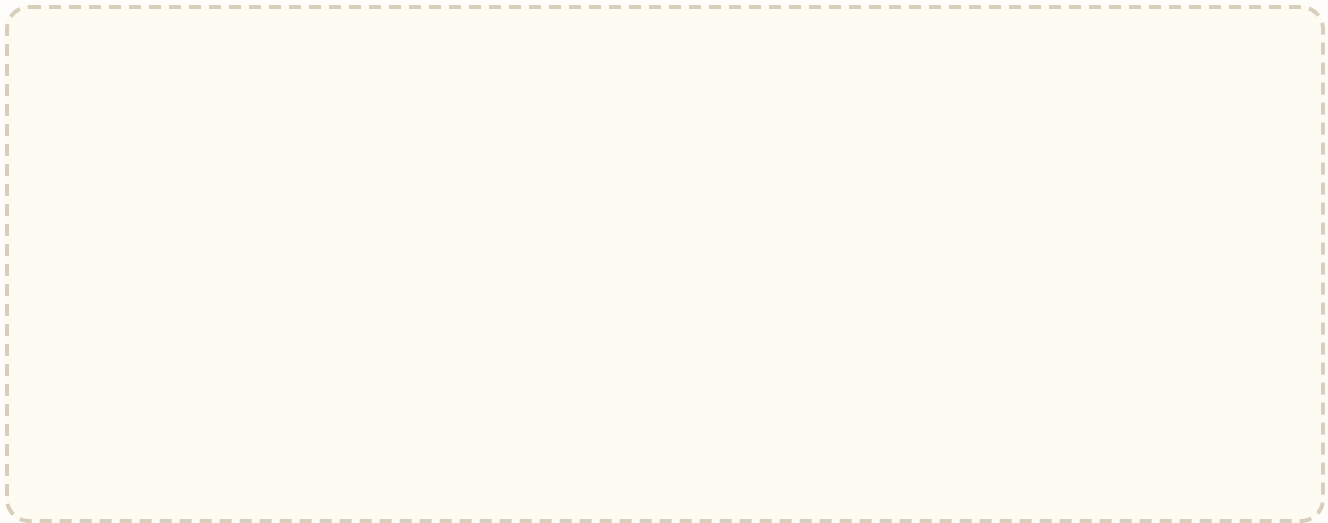
NOV**= NINE**

Greek twin: ENNEA.

November the ninth month... once · **nonagon** nine corners · **nonet** nine players



DRAW IT: Invent a NOV-CREATURE. It has NINE of something. That is a lot.



My nov-creature has nine _____

**I unlocked NOV.**

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT UP — CHAPTER 10: DEC. It means ten. The last one before we solve the whole calendar mix-up.

A NUMBER IS HIDING IN HERE

DEC

DEC means TEN.



Ten — when DEC is a word part.



That last one is the one that matters.

IMPOSTER! Rooty sniffed out a fake.**DECIDE**

Decide starts with DEC, and so does **decorate**. Neither of them has anything to do with **ten**. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

DECember **DEC**ade **DEC**athlon

Three words you have heard before. It has been sitting inside all of them the whole time.
Turn the page and we will take them apart.

1

SAY IT Out loud. Your mouth remembers things your eyes forget.Say **DEC**. It sounds like DEK.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some DEC words.

You just never took one apart before. Watch.

**DEC**hiding inside **DECADE**

DEC means ten, and it is sitting right at the front of **decade**. A decade is **ten years**. You have not lived one yet. You will soon.

Not always two parts. Sometimes the number is baked into a word whole, instead of snapped on like a tile. The ten is still hiding in there — you just have to look.

DEC

+

ATHLON**= DECATHLON**

DEC means ten. **ATHLON** means **contest**.

A decathlon is **ten sports**. A pentathlon was five. This one is twice as hard.



MORE WORDS WITH DEC IN THEM

December the tenth month... once

decimal counting in tens

decapod ten feet — a crab

Two words. One little part. No memorizing.

You did not learn two things just now. You learned **one** — and the others came free.

December. Four in a row.

Something is definitely going on. **DEC** means ten, so December should be month **ten**.

December is month number TWELVE.

September, October, November, December. Four months in a row. Every single one wearing the **wrong number**. Every single one wrong by exactly two.

Four wrongs that are all the same size is not four mistakes. It is **one change** that happened to all of them at once. Turn the page. We are going to catch it.

THE FOUR MONTHS WEARING THE WRONG NUMBER

SEPT	OCT	NOV	DEC
9	10	11	12

Every one wrong by exactly two.

THE WHOLE LIST

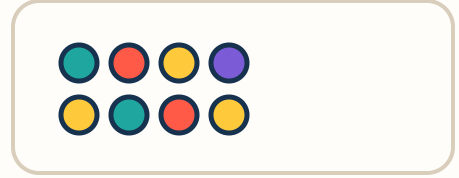
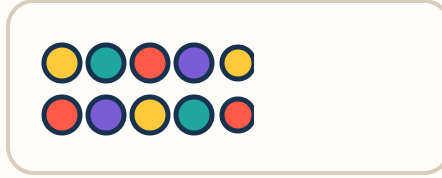
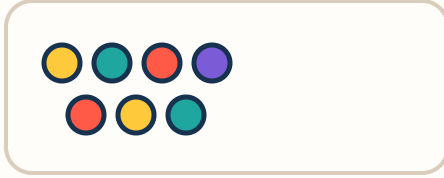
SEPT 7→9 · OCT 8→10 · NOV 9→11 · DEC 10→12. All out by two.



FOUR IN A ROW.

DEC means ten but December is twelfth. That is the last one. Four months, all wrong, all by two. That is not four mistakes. It is one change.

2 COUNT IT Circle the picture that has ten.



3 YES OR NO Quick — do not look back. Circle your answer.

Does **DEC** mean ten?

YES

NO

Is **December** month number ten?

YES

NO

Is a **decade** ten years?

YES

NO

Are **four months** in a row wrong?

YES

NO

Were there **four separate** mistakes?

YES

NO

4 WORK IT OUT A word you have never seen. You do not need help. You have got the piece.

DECAGON

You know **GON** means corner. So a **DECAGON** has how many corners?

That is the whole trick.

You knew a word you had never met, because you knew one little piece of it.

write it
here

ANSWER KEY (turn the page upside down) — COUNT IT: the one with 10. YES OR NO: yes · no · yes · yes · no · yes · yes · no. WORK IT OUT: 10.

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN + GREEK

No. 10 of 12

DEC**= TEN**

Rome and Greece spell this one the same.

December the tenth month... once · **decade** ten years**decathlon** ten sports · **decagon** ten corners

10

DRAW IT: Invent a DEC-CREATURE. It has TEN of something.

My dec-creature has ten _____

I unlocked DEC.☐

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

NEXT — THE ANSWER. Four months. One mistake. Two thousand years ago. Turn the page and we finally catch why four months in a row wear the wrong number.

YOU FOUND SOMETHING NOBODY TOLD YOU

WHO BROKE THE CALENDAR?

You found four months with the wrong numbers. Here is what happened to them.

**SEPT = 7**→ but **September** is the **9th** month**OCT = 8**→ but **October** is the **10th** month**NOV = 9**→ but **November** is the **11th** month**DEC = 10**→ but **December** is the **12th** month

FOUR MONTHS WITH THE NUMBER BAKED RIGHT IN

SEPTember **OCT**ober **NOV**ember **DEC**ember

SEPT is seven. OCT is eight. NOV is nine. DEC is ten. The number is sitting right there in the name.
So why does September wear a seven when it is really the ninth month? Turn the page.

?

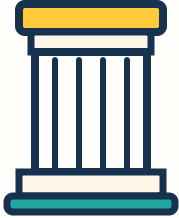
THE PUZZLE *Either every one of these names is wrong — or somebody made a mistake a very long time ago.*

Say all four out loud: **SEPT**, **OCT**, **NOV**, **DEC**.

Every one is off by exactly **two**. That is your first clue.

A very long time ago, the Romans started their year in **March**.

Not January. March. So they counted their months like this:



They counted: March 1, April 2, May 3, June 4 — then two months that were just called **Fifth** and **Sixth** — then September 7, October 8, November 9, December 10.

THE OLD ROMAN WAY — the year starts in March

MAR	APR	MAY	JUN	FIFTH	SIXTH	SEPT	OCT	NOV	DEC
1	2	3	4	5	6	7	8	9	10

Every single one of them was right.

Look at that. September really **was** the seventh month. October really **was** the eighth. The names were perfect. Nobody had made a mistake yet.

SIX MONTHS WERE JUST NUMBERS

Fifth. Sixth. SEPT the seventh. OCT the eighth. NOV the ninth. DEC the tenth. **Six** months, six numbers, every one lined up. Later, two of them got new names after famous Romans — Fifth became **July**, after Julius Caesar, and Sixth became **August**, after Augustus. The other four kept their numbers. Remember that. Turn the page.

Then the Romans moved the start of the year.

First they added two more months: **January** and **February**. Then, about 2,200 years ago, they moved **New Year's Day** to the 1st of January. That pushed every month **two spots later** — and nobody changed the names.

THEN NEW YEAR'S DAY MOVED TO JANUARY →

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	2	3	4	5	6	7	8	9	10	11	12

Every name slid two spots — and nobody changed them.

September got pushed from 7 to **9**. October from 8 to **10**. November from 9 to **11**. December from 10 to **12**. And nobody ever changed the names. So four months have been walking around with the wrong number on them ever since.

DON'T TAKE MY WORD FOR IT. CHECK.

SEPT means seven, but look — September is the 9th. **NOV** means nine, but November is the 11th. **DEC** means ten, but December is the 12th. Every single one is wearing the wrong number. They all got bumped together, about two thousand years ago, and almost nobody ever notices. You just did.



GO ASK A GROWN-UP.

Ask any grown-up why October is the tenth month when OCT means eight. Then watch their face. Most of them have never once thought about it.

I
did it

2 MATCH IT Draw a line from each month-name to the number hiding inside it.

SEPT	•	10	•
OCT	•	9	•
NOV	•	8	•
DEC	•	7	•

3 YES OR NO Quick — don't look back. Circle your answer.

Did the Romans once start their year in March ?	YES	NO
Does SEPT mean seven?	YES	NO
Is October really the eighth month today?	YES	NO
Did New Year's Day move to January?	YES	NO
Did anyone ever fix the four wrong names?	YES	NO

4 WORK IT OUT You don't need a grown-up for this. You need a calendar.

COUNT
IT

Get a real calendar. Put your finger on **March** and count to **September**. You will get **seven**. Then count the normal way, from **January**. You will get **nine**. Both are true.

That is the whole mystery, in your own hands.

Two answers, both right at the same time. One is the old Roman year. One is the year we use now. The name never picked a side.

did it

ANSWER KEY (turn the page upside down) — MATCH IT: SEPT → 7 · OCT → 8 · NOV → 9 · DEC → 10 · YES/NO: yes · yes · no · yes · no · WORK IT OUT: From March you get 7, from January you get 9. Both are true.

MYSTERY SOLVED

YOU DID IT.



So four months have been walking around with the wrong number on them for about **two thousand years**. Almost nobody ever notices.

You did.

DO NOT BELIEVE ME? GO AND COUNT.

Get a calendar. Start at March and count to September — you will get seven. Then count the normal way, from January — you will get nine. Both are true. That is the whole mystery.

DID ANYBODY EVER TRY TO FIX IT?

Sort of. A few Roman emperors renamed months after **themselves**. One of them, Domitian, renamed October "Domitianus." It did not stick. Two *did* stick, though — that is why the fifth and sixth months are now called July and August. The four wrong ones nobody ever touched.

I solved the calendar mystery.☐

Tick the box. You spotted something almost every grown-up has walked past their whole life.

Name _____ Date _____

NEXT UP — CENT. It means a hundred. And look at the bottom of every card you have collected: some of your parts are **Roman** and some are **Greek**. Long ago both of them named the numbers, and English kept both.

A NUMBER IS HIDING IN HERE

CENT

CENT means A HUNDRED.



A hundred — when CENT is a word part.



Ten tens. That is a hundred.

IMPOSTER! Rooty sniffed out a fake.**CENTER**

The **center** is the middle of something, not a **hundred** of it. **Scent** is a smell. Both are fakes. Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

CENTury CENTipede perCENT

Three words you have heard before. It has been sitting inside all of them the whole time.

Turn the page and we will take them apart.

1

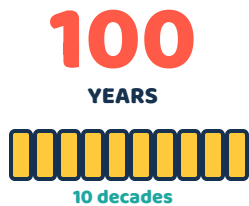
SAY IT Out loud. Your mouth remembers things your eyes forget.Say **CENT**. It sounds like **SENT**.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some CENT words.

You just never took one apart before. Watch.



CENT

hiding inside CENTURY

CENT means a hundred. A **century** is a hundred years — ten decades. That is a very long time. (A Roman *century* of soldiers usually had about **80** men in it. The name stayed anyway.) The **CENT** is sitting right there at the front.

Not always two parts. Sometimes the number is baked into a word whole, instead of snapped on like a tile. The hundred is still hiding in there — you just have to look.

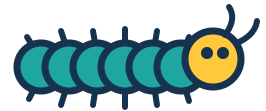
CENT

+

PEDE

= CENTIPEDE

CENT means a hundred. **PEDE** means **foot** — you know it from **biped** and **quadruped**. A centipede is a **hundred-foot** — except no centipede has ever had exactly a hundred. Their legs come in pairs, and the number of pairs is always **odd**. So 30, or 42, or 354. Never 100. (The little **i** in centipede is just glue — a joining sound between the two pieces.)



One catch: most centipedes do not really have a hundred legs. The name is showing off a bit.



CENT

= CENT

Sometimes **CENT** is the whole word. There are a **hundred cents** in a dollar — each one is one part of a hundred. That is exactly why it is called a **cent**.

MORE WORDS WITH CENT IN THEM

percent — for every hundred · **century** — a hundred years · **centimeter** — one of a hundred

3 words. One little part. No memorizing.

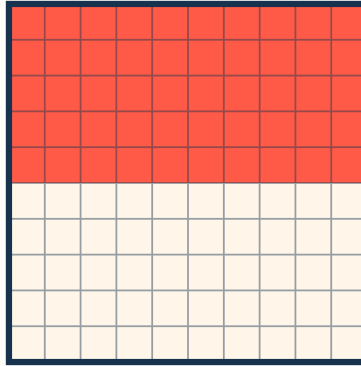
You did not learn 3 things just now. You learned **one** — and the others came free.

You just learned percentages. And you are only five (or six, or seven).

PERCENT means **for every hundred**. That is all it has ever meant.

So **50 percent** means 50 out of every hundred. Half. And **100 percent** means all hundred out of the hundred. Everything.

Big kids find this hard because nobody tells them what the word means. You already know.

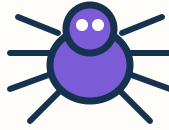


100 squares. Colour in 50 and you have colored half — that is 50 percent.

YOU ARE AHEAD NOW

When someone says a **hundred percent**, you know they mean all of it.

2 COUNT IT Circle the one with the most legs.



3 YES OR NO Quick — do not look back. Circle your answer.

Is a **century** a hundred years?

YES

NO

Does **CENT** mean a hundred?

YES

NO

Are there a hundred **cents** in a dollar?

YES

NO

Does a **centipede** have two legs?

YES

NO

Does **percent** mean for every hundred?

YES

NO

4 WORK IT OUT A word you have never seen. You do not need help. You have got the piece.

CENTURION

A **centurion** was a Roman soldier who was in charge of a group of other soldiers. **How many soldiers do you think were in his group to start with?**

That is the whole trick.

You knew a word you had never met, because you knew one little piece of it.

write it
here

ANSWER KEY (turn the page upside down) — COUNT IT: the one with 30. YES OR NO: yes · yes · yes · yes · no · yes. WORK IT OUT: 100.

Cut this card out along the dashed line and keep it. There are **12** of them in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN

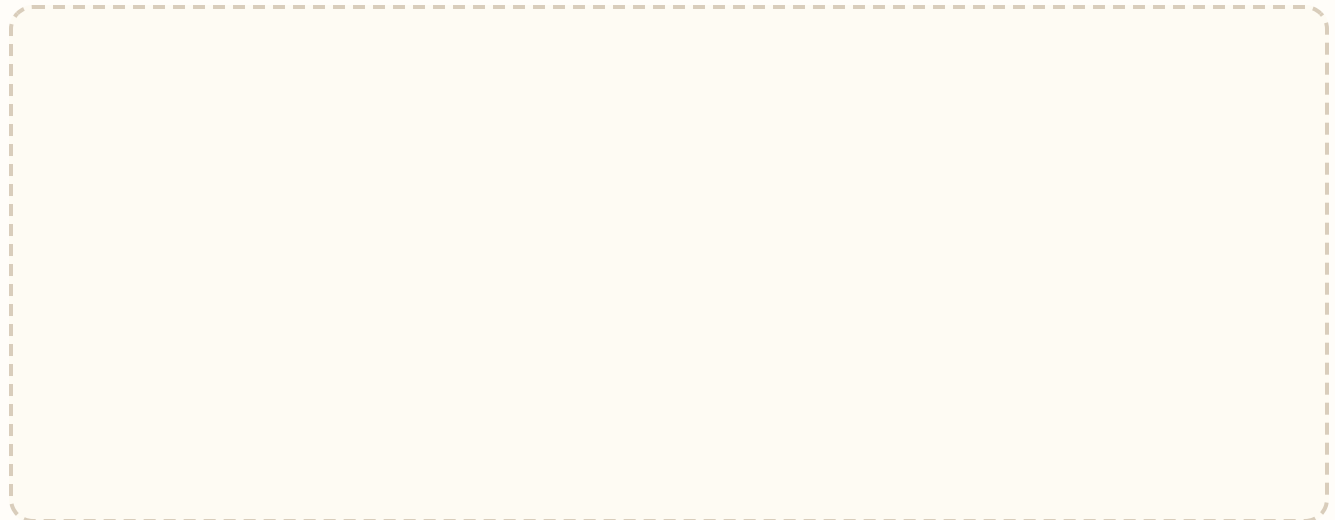
No. 11 of 12

CENT**= A HUNDRED**

Greek twin: HECTO.

century a hundred years · **centipede** a hundred feet · **cent** one of a hundred**percent** for every hundred

100

DRAW IT: Invent a CENT-CREATURE. You do not have to draw a hundred. Draw a lot.

My cent-creature has a hundred _____

I unlocked CENT.

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

LAST ONE — MILLI. It means a thousand. And it tells a lie for two thousand years.

A NUMBER IS HIDING IN HERE

MILLI

MILLI means A THOUSAND.



A thousand — when MILLI is a word part.



Ten hundreds. That is a thousand.

IMPOSTER! Rooty sniffed out a fake.**MILITARY**

Military starts with MILI, but it comes from an old word for **soldier**. No thousand in there.
Always ask what it **means**.

LOOK — IT IS HIDING IN WORDS YOU KNOW

MILLI pede **MILL** ennium **MILLI** meter

Three words you have heard before. It has been sitting inside all of them the whole time.

Turn the page and we will take them apart.

1

SAY IT Out loud. Your mouth remembers things your eyes forget.Say **MILLI**. It sounds like **MILL-ee**.

Say it three times. Tick a box each time you say it.

☐ ☐ ☐

You already know some MILLI words.

You just never took one apart before. Watch.



MILL + **ENNIUM** = **MILLENNIUM**

MILL means a thousand. **ENNIUM** comes from an old word for *years*.
A millennium is a **thousand years**. Ten centuries.

MILLI + **METRE** = **MILLIMETRE**

MILLI means a thousand. A **METRE** is a *length you measure with*.
There are a **thousand millimeters** in a meter.



Look at a ruler. The tiniest lines on it are millimeters. It takes a thousand of those little lines to make one meter.



MILLI + **PEDE** = **MILLIPEDE**

MILLI means a thousand. **PEDE** means *foot*.
A millipede is a **thousand-foot**. Turn the page — this one has a story.

MORE WORDS WITH MILLI IN THEM

millennium a thousand years **milliliter** one of a thousand **millisecond** one of a thousand

3 words. One little part. No memorizing.

You did not learn 3 things just now. You learned **one** — and the others came free.

For hundreds of years, the name was wrong.

MILLI means a thousand. So a millipede should have a **thousand feet**. Most have somewhere around a hundred, or two hundred, or three hundred. For hundreds of years, nobody had ever found one with a thousand legs.

Then, in 2020, somebody did.

Scientists in **Australia** lowered little traps down deep holes drilled for mining — about sixty meters down — and pulled up a pale, blind creature nobody had ever seen.

They counted its legs. **One thousand, three hundred and six.**

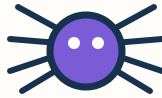
It had been down there the whole time. Nobody had found it yet. The name finally came **true**.



ITS NAME

Scientists called it **Eumillipes persephone**. **EU** means **true**, so its name means the **true thousand-foot**.

Persephone was the Greek queen of the underworld — a good name for something pulled up from sixty meters down.



Does **MILLI** mean a thousand?

YES

NO

YES

NO

YES

NO

YES

NO

YES

NO

MILLION

You knew a word you had never met, because you knew one little piece of it.

write it
here

ANSWER KEY (turn the page upside down) — COUNT IT: the one with 40 (the long one), YES OR NO: yes · no · yes · yes · yes · yes · yes · WORK IT OUT: 1000.

Cut this card out and keep it. There are **12** in this book. When you have them all, you will be able to open up words that most grown-ups cannot.

NUMBER PART CARD

ROMAN

No. 12 of 12

MILLI**= A THOUSAND**Greek twin: **KILO** — you have seen that one on a bag of flour.**millipede** a thousand feet · **millennium** a thousand years**millimeter** one of a thousand · **million** a big thousand**1000**

DRAW IT: Last one. Invent ANY creature you like, but its name must have a number in it. Use any part from this whole book.

I invented a _____

I unlocked MILLI.

Tick the box. You earned it. Nobody can take this one back.

Name _____ Date _____

THAT IS ALL TWELVE. You now own **twelve** number parts. Turn the page — all twelve cards are waiting for you at the back. Next comes **GRADE 1**: the rest of every word in English.

Every card, on one sheet.

Print this page on card if you can, then cut along the dashed lines. That way your chapter pages stay whole — and if you lose one, you can just print this page again.

No. 1 of 12 ROMAN UNI = ONE unicorn · unicycle · uniform	No. 2 of 12 ROMAN BI = TWO bicycle · binoculars · biped	No. 3 of 12 ROMAN + GREEK TRI = THREE triangle · tricycle · triceratops
No. 4 of 12 ROMAN QUAD = FOUR quadruped · quadruplets · quarter	No. 5 of 12 GREEK PENTA = FIVE pentagon · pentathlon · five points	No. 6 of 12 GREEK HEXA = SIX hexagon · hexapod · honeycomb
No. 7 of 12 ROMAN SEPT = SEVEN September · septet · septuplets	No. 8 of 12 ROMAN + GREEK OCT = EIGHT octopus · octagon · October	No. 9 of 12 ROMAN NOV = NINE November · nonagon · nonet
No. 10 of 12 ROMAN + GREEK DEC = TEN December · decade · decagon	No. 11 of 12 ROMAN CENT = A HUNDRED century · centipede · percent	No. 12 of 12 ROMAN MILLI = A THOUSAND millipede · millimeter · million