FACT SHEET · AGES 5–7

All about octopuses

Acorn & Ink

An octopus is a soft sea animal with eight long arms and no bones. It has three hearts and blue blood.

It can change colour to hide, and it squirts dark ink to escape. Octopuses live in every ocean and like to eat crabs.

Quick facts

Arms	8
Hearts	3
Blood	blue
Bones	none
Lives	in the sea
Eats	crabs

Key words

arms: the long parts an octopus moves and grabs with

ink: a dark cloud it squirts to hide

den: an octopus's hiding home

suckers: round cups on the arms that grip

beak: the hard mouth of an octopus

Wow!

Three hearts

An octopus has three hearts.

Blue blood

Its blood is blue.

Squeezy!

It has no bones, so it can squeeze through tiny gaps.

Ink

It squirts dark ink to get away.

Draw an octopus hiding in its den.

Facts: Wikipedia "Octopus" (CC BY-SA 4.0), Natural History Museum, National Geographic, Shedd and Bristol aquariums · our own words

Sheet OCT-YOUNG-FACT-87602

TOPIC SHEET · AGES 5–7

Octopuses

Acorn & Ink

Use the words in the box to fill the gaps. Each word is used once.

Name _____ Date _____ Score _____ / 6

Word bank **blue** **colour** **crabs** **den** **hearts** **sea**

1. Octopus blood is _____.
2. An octopus hides in a home called a _____.
3. An octopus lives in the _____.
4. An octopus likes to eat _____.
5. An octopus has three _____.
6. An octopus can change its _____ to hide.

TOPIC SHEET · AGES 5–7

Octopuses

Acorn & Ink

Read each sentence. Circle True or False.

Name _____ Date _____ Score _____ / 6

1. An octopus has lots of bones. True False
2. Octopus blood is blue. True False
3. An octopus has only one heart. True False
4. An octopus has eight arms. True False
5. An octopus lives in a tree. True False
6. An octopus can squirt ink. True False

Facts: Wikipedia “Octopus” (CC BY-SA 4.0), Natural History Museum and others

Sheet OCT-YOUNG-TF-97465

TOPIC SHEET · AGES 5–7

Octopus word match

Acorn & Ink

Write the letter of the right meaning in each box.

Name _____ Date _____ Score _____ / 5

☐	**beak**	**A**	round cups on the arms that grip
☐	**arms**	**B**	the long parts an octopus moves and grabs with
☐	**den**	**C**	the hard mouth of an octopus
☐	**ink**	**D**	a dark cloud it squirts to hide
☐	**suckers**	**E**	an octopus's hiding home

TOPIC SHEET · AGES 5–7

Did you know? Octopuses

Acorn & Ink

Read the facts. Then draw your own octopus, hiding in its den.

Name _____ Date _____

Grow back
An octopus can grow back a lost arm.

Arms, not tentacles
Scientists call an octopus's eight limbs arms.

Copycat
The mimic octopus pretends to be a lionfish or a sea snake.

Blue blood
Octopus blood is blue because it contains copper.

Draw it here

Write about your drawing.

Facts: Wikipedia "Octopus" (CC BY-SA 4.0), Natural History Museum and others

Sheet OCT-YOUNG-DYK-97403

WORD SEARCH · SMALL · EASY

Octopus words

Acorn & Ink

Find each word and tick it off. The words go across and down.

Name _____ Date _____ Found _____ / 8

n	a	v	e	t	s	x	a
o	i	n	k	u	e	s	x
c	o	p	i	e	a	u	o
t	c	r	a	b	p	c	u
o	d	b	l	u	e	k	m
p	e	g	g	s	b	e	d
u	h	j	c	i	m	r	e
s	q	n	v	p	j	s	n

- [ ] blue
- [ ] crab
- [ ] den
- [ ] eggs
- [ ] ink
- [ ] octopus
- [ ] sea
- [ ] suckers

COLOUR BY SUM · ADDING TO 10

What's the mystery picture?

Acorn & Ink

Work out each sum. Find the answer in the key and colour the square that colour.

3 pink 4 leave white 5 black 6 purple

7 sand 9 light blue

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

ANSWERS · TOPIC SHEET · AGES 5–7

Octopuses

Acorn & Ink

Answers are shown in red.

Name _____ Date _____ Score _____ / 6

Word bank **blue** **colour** **crabs** **den** **hearts** **sea**

1. Octopus blood is **blue**.
2. An octopus hides in a home called a **den**.
3. An octopus lives in the **sea**.
4. An octopus likes to eat **crabs**.
5. An octopus has three **hearts**.
6. An octopus can change its **colour** to hide.

ANSWERS · TOPIC SHEET · AGES 5–7

Octopuses

Acorn & Ink

Answers are shown in red.

Name _____ Date _____ Score _____ / 6

1. An octopus has lots of bones. True **False**
2. Octopus blood is blue. **True** False
3. An octopus has only one heart. True **False**
4. An octopus has eight arms. **True** False
5. An octopus lives in a tree. True **False**
6. An octopus can squirt ink. **True** False

ANSWERS · TOPIC SHEET · AGES 5–7

Octopus word match

Acorn & Ink

Answers are shown in red.

Name _____ Date _____ Score _____ / 5

C	**beak**	**A**	round cups on the arms that grip
B	**arms**	**B**	the long parts an octopus moves and grabs with
E	**den**	**C**	the hard mouth of an octopus
D	**ink**	**D**	a dark cloud it squirts to hide
A	**suckers**	**E**	an octopus's hiding home

ANSWERS · WORD SEARCH · SMALL · EASY

Octopus words

The hidden words are shaded in red.

Acorn & Ink

n	a	v	e	t	s	x	a
o	i	n	k	u	e	s	x
c	o	p	i	e	a	u	o
t	c	r	a	b	p	c	u
o	d	b	l	u	e	k	m
p	e	g	g	s	b	e	d
u	h	j	c	i	m	r	e
s	q	n	v	p	j	s	n

☐ blue ☐ crab ☐ den ☐ eggs ☐ ink ☐ octopus ☐ sea ☐ suckers

Acorn & Ink

It's an octopus!

Here's how the finished picture looks.

3 pink 4 leave white 5 black 6 purple

7 sand 9 light blue

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

FACT SHEET · AGES 7–11

All about octopuses

Acorn & Ink

Octopuses are clever, soft-bodied sea animals with eight arms covered in suckers. They are molluscs, related to squid and cuttlefish, and there are about 300 kinds.

An octopus has three hearts, blue blood and no bones, so it can squeeze through tiny gaps; the only hard part is its beak. It can change its colour and skin texture in an instant to hide, squirt a cloud of ink to escape, and even taste things with its suckers.

Quick facts

Group	mollusc (cephalopod)
Kinds	about 300
Arms	8
Hearts	3
Blood	blue
Lives	in every ocean
Eats	crabs, shrimps, clams, fish
Life span	often 1 to 2 years
Biggest	giant Pacific octopus

Key words

invertebrate: an animal with no backbone

camouflage: changing colour to blend in

siphon: a tube that squirts water to move fast

mantle: the bag-like body behind the head

suckers: cups on the arms that grip and taste

predator: an animal that hunts other animals

Fun facts

Arms, not tentacles
Scientists call an octopus's eight limbs arms.

Rock door
Some octopuses pull a rock across the door of their den.

Copycat
The mimic octopus pretends to be a lionfish or a sea snake.

Squeezy!
With no bones, only the beak limits how small a gap it fits through.

Grow back
An octopus can grow back a lost arm.

Coconut homes
The veined octopus carries coconut shells to hide in.

My favourite fact is...

Facts: Wikipedia "Octopus" (CC BY-SA 4.0), Natural History Museum, National Geographic, Shedd and Bristol aquariums · our own words

Sheet OCT-MID-FACT-79139

TOPIC SHEET · AGES 7–11

Octopuses

Acorn & Ink

Use the words in the box to fill the gaps. Each word is used once.

Name _____ Date _____ Score _____ / 10

Word bank

300 arm bones camouflage feet hearts Pacific siphon suckers taste

1. An octopus has three _____.
2. An octopus can grow back a lost _____.
3. An octopus can shoot away by pushing water out of its _____.
4. The giant _____ octopus is the biggest kind.
5. An octopus has no _____, so it can squeeze through tiny gaps.
6. An octopus has eight arms covered in _____.
7. The name octopus means “eight _____”.
8. Changing colour to blend in is called _____.
9. The suckers let an octopus _____ what it touches.
10. There are about _____ kinds of octopus.

Facts: Wikipedia “Octopus” (CC BY-SA 4.0), Natural History Museum and others

TOPIC SHEET · AGES 7–11

Octopuses

Acorn & Ink

Read each sentence. Circle True or False.

Name _____ **Date** _____ **Score** _____ / 8

1. An octopus has three hearts. True False
2. There are about 300 kinds of octopus. True False
3. Some octopuses use coconut shells as shelters. True False
4. An octopus can grow back a lost arm. True False
5. Some octopuses live in rivers. True False
6. Most octopuses live for 20 years. True False
7. Octopuses can taste with their suckers. True False
8. Octopuses have strong bones in their arms. True False

Facts: Wikipedia “Octopus” (CC BY-SA 4.0), Natural History Museum and others

Sheet OCT-MID-TF-17312

TOPIC SHEET · AGES 7–11

Octopus word match

Acorn & Ink

Write the letter of the right meaning in each box.

Name _____ Date _____ Score _____ / 7

☐	**den**	**A**	an animal that hunts other animals
☐	**predator**	**B**	the bag-like body behind the head
☐	**venom**	**C**	an octopus's hiding place
☐	**suckers**	**D**	a harmful liquid an animal injects
☐	**camouflage**	**E**	changing colour to blend in
☐	**invertebrate**	**F**	an animal with no backbone
☐	**mantle**	**G**	cups on the arms that grip and taste

TOPIC SHEET · AGES 7–11

Acorn & Ink

Octopus mini quiz

Fill the gaps using the word bank, then circle True or False.

Name _____ Date _____ Score _____ / 10

Word bank 300 beak coconut copper Pacific taste

1. The suckers let an octopus _____ what it touches.
2. Octopus blood is blue because it contains _____.
3. The veined octopus carries _____ shells to hide in.
4. There are about _____ kinds of octopus.
5. The giant _____ octopus is the biggest kind.
6. The only hard part of an octopus is its _____.

True or false?

7. Some octopuses live in rivers. True False
8. An octopus can grow back a lost arm. True False
9. An octopus has three hearts. True False
10. Some octopuses use coconut shells as shelters. True False

WORD SEARCH · MEDIUM · MEDIUM

Octopus words

Acorn & Ink

Find each word and tick it off. The words go across, down and diagonally.

Name _____ Date _____ Found _____ / 12

a	c	s	f	p	o	s	h	z	i	j
p	k	e	x	p	c	s	c	v	r	c
b	i	i	i	h	t	u	a	q	g	k
e	n	p	v	e	o	c	m	d	i	m
a	k	r	e	a	p	k	o	y	l	a
k	s	e	n	r	u	e	u	d	l	n
w	i	d	o	t	s	r	f	r	s	t
y	p	a	m	s	h	s	l	x	a	l
m	h	t	s	a	u	a	a	a	r	e
o	o	o	h	s	o	z	g	x	m	g
s	n	r	u	f	r	f	e	m	s	n

☐ arms ☐ beak ☐ camouflage ☐ gills ☐ hearts ☐ ink

☐ mantle ☐ octopus ☐ predator ☐ siphon ☐ suckers

☐ venom

COLOUR BY SUM · TIMES TABLES

What's the mystery picture?

Acorn & Ink

Work out each sum. Find the answer in the key and colour the square that colour.

14 sand 20 purple 24 pink 32 light blue

36 leave white 45 black

4 × 8	4 × 8	8 × 4	4 × 8	8 × 4	4 × 8	8 × 4	4 × 8	4 × 8	4 × 8	4 × 8	4 × 8	4 × 8	8 × 4
4 × 8	4 × 8	4 × 8	4 × 8	10 × 2	2 × 10	2 × 10	5 × 4	2 × 10	5 × 4	8 × 4	8 × 4	8 × 4	4 × 8
8 × 4	8 × 4	8 × 4	2 × 10	4 × 5	5 × 4	10 × 2	10 × 2	4 × 5	2 × 10	2 × 10	4 × 8	8 × 4	4 × 8
4 × 8	8 × 4	4 × 5	10 × 2	2 × 10	10 × 2	10 × 2	10 × 2	10 × 2	4 × 5	10 × 2	4 × 5	8 × 4	8 × 4
4 × 8	8 × 4	5 × 4	2 × 10	9 × 4	4 × 9	4 × 5	10 × 2	9 × 4	4 × 9	10 × 2	2 × 10	4 × 8	8 × 4
4 × 8	4 × 8	2 × 10	10 × 2	6 × 6	9 × 5	5 × 4	2 × 10	6 × 6	5 × 9	10 × 2	2 × 10	8 × 4	8 × 4
4 × 8	4 × 8	2 × 10	4 × 5	10 × 2	5 × 4	5 × 4	10 × 2	2 × 10	10 × 2	10 × 2	10 × 2	8 × 4	4 × 8
8 × 4	4 × 8	4 × 5	5 × 4	2 × 10	4 × 5	6 × 4	3 × 8	10 × 2	2 × 10	5 × 4	5 × 4	8 × 4	4 × 8
4 × 8	4 × 8	4 × 8	5 × 4	10 × 2	2 × 10	10 × 2	4 × 5	2 × 10	5 × 4	2 × 10	8 × 4	8 × 4	8 × 4
8 × 4	4 × 8	5 × 4	10 × 2	4 × 5	4 × 5	10 × 2	4 × 5	5 × 4	4 × 5	5 × 4	10 × 2	8 × 4	4 × 8
4 × 8	2 × 10	4 × 5	5 × 4	4 × 5	2 × 10	4 × 5	5 × 4	2 × 10	2 × 10	4 × 5	5 × 4	5 × 4	8 × 4
4 × 5	2 × 10	8 × 4	5 × 4	2 × 10	8 × 4	5 × 4	5 × 4	8 × 4	5 × 4	4 × 5	8 × 4	2 × 10	5 × 4
2 × 10	4 × 8	8 × 4	4 × 5	4 × 8	4 × 8	10 × 2	8 × 4	8 × 4	10 × 2	8 × 4	8 × 4	5 × 4	4 × 8
2 × 10	4 × 8	4 × 8	4 × 5	4 × 8	4 × 8	4 × 5	8 × 4	8 × 4	2 × 10	8 × 4	4 × 8	10 × 2	8 × 4
8 × 4	5 × 4	8 × 4	8 × 4	2 × 10	8 × 4	4 × 8	4 × 5	4 × 8	4 × 8	4 × 5	8 × 4	4 × 8	10 × 2
7 × 2	2 × 7	2 × 7	2 × 7	2 × 7	2 × 7	7 × 2	2 × 7	2 × 7	2 × 7	2 × 7	2 × 7	2 × 7	7 × 2

MULTIPLYING

The 8 times table

Work out each answer and write it in the box.

Name _____ Date _____ Score _____ / 20

1	12 × 8 =		11	2 × 8 =	
2	3 × 8 =		12	11 × 8 =	
3	10 × 8 =		13	4 × 8 =	
4	1 × 8 =		14	2 × 8 =	
5	7 × 8 =		15	5 × 8 =	
6	5 × 8 =		16	1 × 8 =	
7	4 × 8 =		17	8 × 8 =	
8	9 × 8 =		18	3 × 8 =	
9	8 × 8 =		19	10 × 8 =	
10	6 × 8 =		20	11 × 8 =	

Acorn & Ink

Octopuses

Answers are shown in red.

Name _____ Date _____ Score _____ / 10

Word bank

300 arm bones camouflage feet hearts Pacific siphon suckers taste

1. An octopus has three **hearts**.
2. An octopus can grow back a lost **arm**.
3. An octopus can shoot away by pushing water out of its **siphon**.
4. The giant **Pacific** octopus is the biggest kind.
5. An octopus has no **bones**, so it can squeeze through tiny gaps.
6. An octopus has eight arms covered in **suckers**.
7. The name octopus means “eight **feet**”.
8. Changing colour to blend in is called **camouflage**.
9. The suckers let an octopus **taste** what it touches.
10. There are about **300** kinds of octopus.

Facts: Wikipedia “Octopus” (CC BY-SA 4.0), Natural History Museum and others

Sheet OCT-MID-GAPS-71673

ANSWERS · TOPIC SHEET · AGES 7–11

Acorn & Ink

Octopuses

Answers are shown in red.

Name _____ Date _____ Score _____ / 8

1. An octopus has three hearts. **True** False
2. There are about 300 kinds of octopus. **True** False
3. Some octopuses use coconut shells as shelters. **True** False
4. An octopus can grow back a lost arm. **True** False
5. Some octopuses live in rivers. True **False**
6. Most octopuses live for 20 years. True **False**
7. Octopuses can taste with their suckers. **True** False
8. Octopuses have strong bones in their arms. True **False**

Facts: Wikipedia “Octopus” (CC BY-SA 4.0), Natural History Museum and others

Sheet OCT-MID-TF-17312

ANSWERS · TOPIC SHEET · AGES 7–11

Octopus word match

Acorn & Ink

Answers are shown in red.

Name _____ Date _____ Score _____ / 7

C	**den**	**A**	an animal that hunts other animals
A	**predator**	**B**	the bag-like body behind the head
D	**venom**	**C**	an octopus's hiding place
G	**suckers**	**D**	a harmful liquid an animal injects
E	**camouflage**	**E**	changing colour to blend in
F	**invertebrate**	**F**	an animal with no backbone
B	**mantle**	**G**	cups on the arms that grip and taste

ANSWERS · TOPIC SHEET · AGES 7–11

Octopus mini quiz

Acorn & Ink

Answers are shown in red.

Name _____ Date _____ Score _____ / 10

Word bank 300 beak coconut copper Pacific taste

1. The suckers let an octopus **taste** what it touches.
2. Octopus blood is blue because it contains **copper**.
3. The veined octopus carries **coconut** shells to hide in.
4. There are about **300** kinds of octopus.
5. The giant **Pacific** octopus is the biggest kind.
6. The only hard part of an octopus is its **beak**.

True or false?

7. Some octopuses live in rivers. — True / **False**
8. An octopus can grow back a lost arm. — **True** / False
9. An octopus has three hearts. — **True** / False
10. Some octopuses use coconut shells as shelters. — **True** / False

ANSWERS · WORD SEARCH · MEDIUM · MEDIUM

Octopus words

The hidden words are shaded in red.

a	c	s	f	p	o	s	h	z	i	j
p	k	e	x	p	c	s	c	v	r	c
b	i	i	i	h	t	u	a	q	g	k
e	n	p	v	e	o	c	m	d	i	m
a	k	r	e	a	p	k	o	y	l	a
k	s	e	n	r	u	e	u	d	l	n
w	i	d	o	t	s	r	f	r	s	t
y	p	a	m	s	h	s	l	x	a	l
m	h	t	s	a	u	a	a	a	r	e
o	o	o	h	s	o	z	g	x	m	g
s	n	r	u	f	r	f	e	m	s	n

- [ ] arms
- [ ] beak
- [ ] camouflage
- [ ] gills
- [ ] hearts
- [ ] ink
- [ ] mantle
- [ ] octopus
- [ ] predator
- [ ] siphon
- [ ] suckers
- [ ] venom

Acorn & Ink

It's an octopus!

Here's how the finished picture looks.

4 × 8	4 × 8	8 × 4	4 × 8	8 × 4	4 × 8	8 × 4	4 × 8	4 × 8	4 × 8	4 × 8	4 × 8	4 × 8	8 × 4
4 × 8	4 × 8	4 × 8	4 × 8	10 × 2	2 × 10	2 × 10	5 × 4	2 × 10	5 × 4	8 × 4	8 × 4	8 × 4	4 × 8
8 × 4	8 × 4	8 × 4	2 × 10	4 × 5	5 × 4	10 × 2	10 × 2	4 × 5	2 × 10	2 × 10	4 × 8	8 × 4	4 × 8
4 × 8	8 × 4	4 × 5	10 × 2	2 × 10	10 × 2	10 × 2	10 × 2	10 × 2	4 × 5	10 × 2	4 × 5	8 × 4	8 × 4
4 × 8	8 × 4	5 × 4	2 × 10	9 × 4	4 × 9	4 × 5	10 × 2	9 × 4	4 × 9	10 × 2	2 × 10	4 × 8	8 × 4
4 × 8	4 × 8	2 × 10	10 × 2	6 × 6	9 × 5	5 × 4	2 × 10	6 × 6	5 × 9	10 × 2	2 × 10	8 × 4	8 × 4
4 × 8	4 × 8	2 × 10	4 × 5	10 × 2	5 × 4	5 × 4	10 × 2	2 × 10	10 × 2	10 × 2	10 × 2	8 × 4	4 × 8
8 × 4	4 × 8	4 × 5	5 × 4	2 × 10	4 × 5	6 × 4	3 × 8	10 × 2	2 × 10	5 × 4	5 × 4	8 × 4	4 × 8
4 × 8	4 × 8	4 × 8	5 × 4	10 × 2	2 × 10	10 × 2	4 × 5	2 × 10	5 × 4	2 × 10	8 × 4	8 × 4	8 × 4
8 × 4	4 × 8	5 × 4	10 × 2	4 × 5	4 × 5	10 × 2	4 × 5	5 × 4	4 × 5	5 × 4	10 × 2	8 × 4	4 × 8
4 × 8	2 × 10	4 × 5	5 × 4	4 × 5	2 × 10	4 × 5	5 × 4	2 × 10	2 × 10	4 × 5	5 × 4	5 × 4	8 × 4
4 × 5	2 × 10	8 × 4	5 × 4	2 × 10	8 × 4	5 × 4	5 × 4	8 × 4	5 × 4	4 × 5	8 × 4	2 × 10	5 × 4
2 × 10	4 × 8	8 × 4	4 × 5	4 × 8	4 × 8	10 × 2	8 × 4	8 × 4	10 × 2	8 × 4	8 × 4	5 × 4	4 × 8
2 × 10	4 × 8	4 × 8	4 × 5	4 × 8	4 × 8	4 × 5	8 × 4	8 × 4	2 × 10	8 × 4	4 × 8	10 × 2	8 × 4
8 × 4	5 × 4	8 × 4	8 × 4	2 × 10	8 × 4	4 × 8	4 × 5	4 × 8	4 × 8	4 × 5	8 × 4	4 × 8	10 × 2
7 × 2	2 × 7	2 × 7	2 × 7	2 × 7	2 × 7	7 × 2	2 × 7	2 × 7	2 × 7	2 × 7	2 × 7	2 × 7	7 × 2

14 sand 20 purple 24 pink 32 light blue

36 leave white 45 black

ANSWERS · MULTIPLYING

The 8 times table

Acorn & Ink

Check each box against these answers.

Name _____ Date _____ Score _____ / 20

1	12 × 8 =	96	11	2 × 8 =	16
2	3 × 8 =	24	12	11 × 8 =	88
3	10 × 8 =	80	13	4 × 8 =	32
4	1 × 8 =	8	14	2 × 8 =	16
5	7 × 8 =	56	15	5 × 8 =	40
6	5 × 8 =	40	16	1 × 8 =	8
7	4 × 8 =	32	17	8 × 8 =	64
8	9 × 8 =	72	18	3 × 8 =	24
9	8 × 8 =	64	19	10 × 8 =	80
10	6 × 8 =	48	20	11 × 8 =	88

FACT SHEET · AGES 11–14

All about octopuses

Acorn & Ink

Octopuses are soft-bodied molluscs in the cephalopod group, alongside squid and cuttlefish. There are about 300 species, living in every ocean from rock pools to the deep sea, but none in fresh water.

An octopus has three hearts, copper-based blue blood and no bones apart from its beak. Its skin can change colour and texture in an instant, and its suckers can taste and smell what they touch.

Quick facts

Group	mollusc (cephalopod)
Kinds	about 300
Arms	8
Hearts	3
Blood	blue
Lives	in every ocean
Eats	crabs, shrimps, clams, fish
Life span	often 1 to 2 years
Biggest	giant Pacific octopus

Key words

cephalopod: the mollusc group with octopuses, squid and cuttlefish

invertebrate: an animal with no backbone

haemocyanin: a copper-rich protein that carries oxygen in octopus blood

chromatophore: a skin cell with colour that helps change colour

neuron: a nerve cell

mimicry: copying another animal to stay safe

Fun facts

Squeezy!
With no bones, only the beak limits how small a gap it fits through.

Coconut homes
The veined octopus carries coconut shells to hide in.

Grow back
An octopus can grow back a lost arm.

Blue blood
Octopus blood is blue because it contains copper.

Going deeper

- An octopus has about 500 million neurons, as many as a dog, and about two-thirds are in its arms.
- Octopus blood uses haemocyanin, a copper-rich protein that carries oxygen well in cold water with little oxygen.
- Engineers study octopus arms to build soft robots that can grip and move objects.
- Since 2012 UK law on animal experiments has protected all cephalopods, because they may feel pain.

> **Think about it:** Octopuses are very clever but usually live only a year or two. How might a short life affect the way they learn?

Facts: Wikipedia “Octopus” (CC BY-SA 4.0), Natural History Museum, National Geographic, Shedd and Bristol aquariums · our own words

Sheet OCT-TEEN-FACT-11688

TOPIC SHEET · AGES 11–14

Octopuses

Acorn & Ink

Use the words in the box to fill the gaps. Each word is used once.

Name _____ Date _____ Score _____ / 10

Word bank

cephalopods **chromatophores** **haemocyanin** **invertebrate** **Jurassic** **mantle** **mimic** **neurons** **robots** **suckers**

1. Octopuses evolved in the _____ period.
2. Skin cells called _____ help an octopus change colour.
3. Engineers study octopus arms to build soft _____.
4. Octopuses, squid and cuttlefish are molluscs called _____.
5. The bag-like body that holds most organs is the _____.
6. An octopus has no backbone, so it is an _____.
7. Octopus blood carries oxygen using a copper-rich protein called _____.
8. Octopuses can taste and smell with their _____.
9. About two-thirds of an octopus's _____ are in its arms.
10. The _____ octopus copies lionfish and sea snakes.

TOPIC SHEET · AGES 11–14

Octopuses

Acorn & Ink

Read each sentence. Circle True or False.

Name _____ **Date** _____ **Score** _____ / 7

1. Most of an octopus's neurons are in its central brain. True False
2. The common octopus has about as many neurons as a dog. True False
3. Octopuses can briefly crawl out of the water. True False
4. Octopuses are vertebrates. True False
5. Octopus blood carries oxygen using copper. True False
6. All octopuses are venomous. True False
7. "Octopi" is the standard English plural. True False

Facts: Wikipedia "Octopus" (CC BY-SA 4.0), Natural History Museum and others

TOPIC SHEET · AGES 11–14

Octopus word match

Write the letter of the right meaning in each box.

Name _____ Date _____ Score _____ / 7

☐	**cephalopod**	**A** a copper-rich protein that carries oxygen in octopus blood
☐	**siphon**	**B** a tube used to breathe and to jet away
☐	**chromatophore**	**C** copying another animal to stay safe
☐	**mimicry**	**D** the mollusc group with octopuses, squid and cuttlefish
☐	**haemocyanin**	**E** an animal with no backbone
☐	**invertebrate**	**F** a skin cell with colour that helps change colour
☐	**mollusc**	**G** a soft-bodied animal group, including snails and clams

TOPIC SHEET · AGES 11–14

Acorn & Ink

Octopuses: think and discuss

Read the facts, then write your answers. There are no wrong answers if you give reasons.

Name _____ Date _____

Rock door
Some octopuses pull a rock across the door of their den.

Coconut homes
The veined octopus carries coconut shells to hide in.

Copycat
The mimic octopus pretends to be a lionfish or a sea snake.

Tasting with arms
The suckers can taste what they touch.

Engineers copy octopus arms to build soft robots. What jobs could a soft robot arm do better than a hard one?

Octopuses are very clever but usually live only a year or two. How might a short life affect the way they learn?

Facts: Wikipedia “Octopus” (CC BY-SA 4.0), Natural History Museum and others

Sheet OCT-TEEN-DYK-17157

WORD SEARCH · LARGE · HARD

Octopus words

Acorn & Ink

Find each word and tick it off. The words can go in any direction, even backwards.

Name _____ Date _____ Found _____ / 14

y	h	b	c	y	w	w	s	t	r	a	e	h	m
k	v	s	r	e	k	c	u	s	o	o	t	d	p
b	a	e	t	a	r	b	e	t	r	e	v	n	i
k	s	e	d	e	q	e	k	v	z	a	r	m	s
u	u	n	b	h	m	q	k	m	a	n	t	l	e
z	p	b	m	w	y	v	s	l	l	i	g	m	n
x	o	m	r	g	q	e	x	q	m	q	m	t	e
m	t	b	u	p	g	n	q	a	w	f	p	o	q
p	c	w	c	a	m	o	u	f	l	a	g	e	o
f	o	h	e	w	x	m	w	f	i	u	w	i	l
n	n	e	m	o	l	l	u	s	c	n	c	v	e
a	u	k	e	b	v	p	t	h	v	w	k	f	c
p	r	e	d	a	t	o	r	e	x	r	l	g	h
g	c	e	s	i	p	h	o	n	i	y	p	k	d

- [ ] arms
- [ ] beak
- [ ] camouflage
- [ ] gills
- [ ] hearts
- [ ] ink
- [ ] invertebrate
- [ ] mantle
- [ ] mollusc
- [ ] octopus
- [ ] predator
- [ ] siphon
- [ ] suckers
- [ ] venom

Acorn & Ink

Octopuses

Answers are shown in red.

Name _____ Date _____ Score _____ / 10

Word bank

cephalopods **chromatophores** **haemocyanin** **invertebrate** **Jurassic** **mantle** **mimic** **neurons** **robots** **suckers**

1. Octopuses evolved in the **Jurassic** period.
2. Skin cells called **chromatophores** help an octopus change colour.
3. Engineers study octopus arms to build soft **robots**.
4. Octopuses, squid and cuttlefish are molluscs called **cephalopods**.
5. The bag-like body that holds most organs is the **mantle**.
6. An octopus has no backbone, so it is an **invertebrate**.
7. Octopus blood carries oxygen using a copper-rich protein called **haemocyanin**.
8. Octopuses can taste and smell with their **suckers**.
9. About two-thirds of an octopus's **neurons** are in its arms.
10. The **mimic** octopus copies lionfish and sea snakes.

ANSWERS · TOPIC SHEET · AGES 11–14

Acorn & Ink

Octopuses

Answers are shown in red.

Name _____ **Date** _____ **Score** _____ / 7

1. Most of an octopus's neurons are in its central brain. — True **False**
2. The common octopus has about as many neurons as a dog. — **True** False
3. Octopuses can briefly crawl out of the water. — **True** False
4. Octopuses are vertebrates. — True **False**
5. Octopus blood carries oxygen using copper. — **True** False
6. All octopuses are venomous. — **True** False
7. "Octopi" is the standard English plural. — True **False**

ANSWERS · TOPIC SHEET · AGES 11–14

Octopus word match

Acorn & Ink

Answers are shown in red.

Name _____ Date _____ Score _____ / 7

D	**cephalopod**	**A**	a copper-rich protein that carries oxygen in octopus blood
B	**siphon**	**B**	a tube used to breathe and to jet away
F	**chromatophore**	**C**	copying another animal to stay safe
C	**mimicry**	**D**	the mollusc group with octopuses, squid and cuttlefish
A	**haemocyanin**	**E**	an animal with no backbone
E	**invertebrate**	**F**	a skin cell with colour that helps change colour
G	**mollusc**	**G**	a soft-bodied animal group, including snails and clams

ANSWERS · WORD SEARCH · LARGE · HARD

Octopus words

Acorn & Ink

The hidden words are shaded in red.

y	h	b	c	y	w	w	s	t	r	a	e	h	m
k	v	s	r	e	k	c	u	s	o	o	t	d	p
b	a	e	t	a	r	b	e	t	r	e	v	n	i
k	s	e	d	e	q	e	k	v	z	a	r	m	s
u	u	n	b	h	m	q	k	m	a	n	t	l	e
z	p	b	m	w	y	v	s	l	l	i	g	m	n
x	o	m	r	g	q	e	x	q	m	q	m	t	e
m	t	b	u	p	g	n	q	a	w	f	p	o	q
p	c	w	c	a	m	o	u	f	l	a	g	e	o
f	o	h	e	w	x	m	w	f	i	u	w	i	l
n	n	e	m	o	l	l	u	s	c	n	c	v	e
a	u	k	e	b	v	p	t	h	v	w	k	f	c
p	r	e	d	a	t	o	r	e	x	r	l	g	h
g	c	e	s	i	p	h	o	n	i	y	p	k	d

- [ ] arms
- [ ] beak
- [ ] camouflage
- [ ] gills
- [ ] hearts
- [ ] ink
- [ ] invertebrate
- [ ] mantle
- [ ] mollusc
- [ ] octopus
- [ ] predator
- [ ] siphon
- [ ] suckers
- [ ] venom