

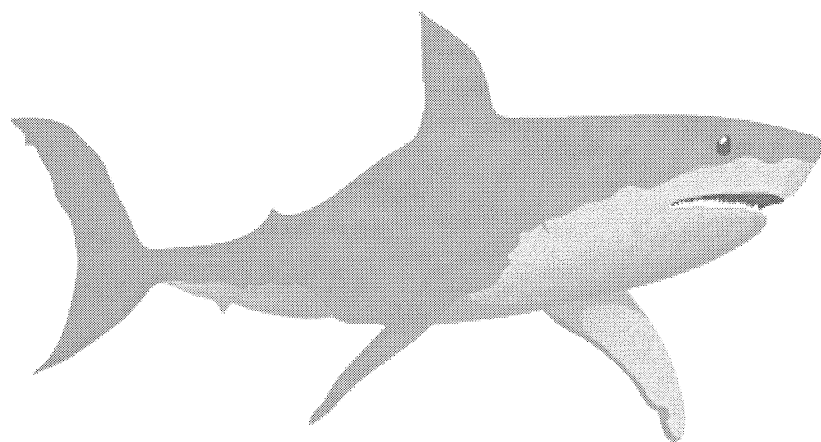
# Sharks – The Leaders of the Ocean

There are around 400 different types of sharks in the world. Sharks are the top predators of the ocean's natural food chain.

Sharks have incredibly sharp teeth and they never run out of them. If a shark loses a tooth, another moves forward from within the shark's jaw (where it neatly keeps a supply of replacement teeth). This way, it is almost impossible for a shark to end up without a full set of teeth. A shark may grow and use over 20 000 teeth in its lifetime.

Sharks have super senses. Two-thirds of a shark's brain is dedicated to its most powerful sense – smell. They have a mirror-like layer on their eyes, allowing them to see better in the water. Sharks are also able to feel vibrations in the water, using a line of canals that go from its head to its tail. These canals are filled with water and contain sensory cells with hairs growing out of them.

On average, a shark's lifespan is 20-30 years in the wild.



Name \_\_\_\_\_

Date \_\_\_\_\_

## Sharks – The Leaders of the Ocean

1. What is the main idea of this text?

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2. What are three details that support the main idea?

Detail 1: \_\_\_\_\_

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Detail 2: \_\_\_\_\_

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Detail 3: \_\_\_\_\_

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3. Carefully read the text.

Underline any words which are repeated, or seem important. Write them down.

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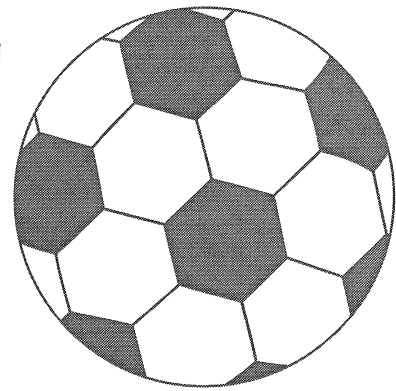
4. Another good title for this text could be

- a) Small Sharks.
- b) I Love Sharks.
- c) Facts about Sharks.
- d) My Pet Shark.

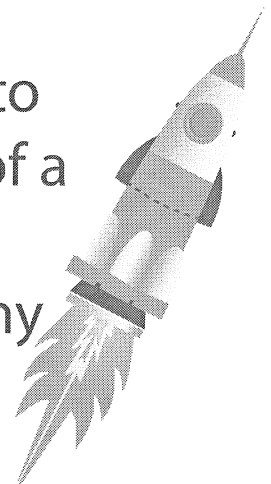
13. 4 boys weigh 165 kg combined. If two of the boys weigh 92 kg combined and another boy weighs 34 kg, what does the fourth boy weigh?



14. The local soccer club is looking to purchase new balls for their 192 players. They need 5 balls for every 20 players. How many balls do they need?



15. The average distance from the Earth to the Moon is 384 000 km. The length of a marathon is 42 km. If you could run from the Earth to the Moon, how many marathons would you have run?



# Written methods – adding and subtracting decimals

When we add and subtract decimals we follow the same rules we use when working with whole numbers. We need to make sure we line up the place values and the decimal points:

	T	U	T
3	<del>3</del>	1	3 • 3
-	1	7	• 2
	2	6	• 1

**1** Estimate and solve these addition problems. Remember to put the decimal point into your answers:

<p>e: <input style="width: 100%;" type="text"/></p> <p><b>a</b></p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">T</td><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">U</td><td style="border-bottom: 1px solid black; padding: 2px 5px;">T</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">5</td><td style="border-right: 1px dashed black; padding: 2px 5px;">4</td><td style="padding: 2px 5px;">• 1</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">+</td><td style="border-right: 1px dashed black; padding: 2px 5px;">3</td><td style="padding: 2px 5px;">1 • 3</td></tr> <tr><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-top: 1px solid black; padding-top: 2px;"></td></tr> </table>	T	U	T	5	4	• 1	+	3	1 • 3				<p>e: <input style="width: 100%;" type="text"/></p> <p><b>b</b></p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">T</td><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">U</td><td style="border-bottom: 1px solid black; padding: 2px 5px;">T</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">3</td><td style="border-right: 1px dashed black; padding: 2px 5px;">2</td><td style="padding: 2px 5px;">• 3</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">+</td><td style="border-right: 1px dashed black; padding: 2px 5px;">5</td><td style="padding: 2px 5px;">8 • 1</td></tr> <tr><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-top: 1px solid black; padding-top: 2px;"></td></tr> </table>	T	U	T	3	2	• 3	+	5	8 • 1				<p>e: <input style="width: 100%;" type="text"/></p> <p><b>c</b></p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">T</td><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">U</td><td style="border-bottom: 1px solid black; padding: 2px 5px;">T</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">4</td><td style="border-right: 1px dashed black; padding: 2px 5px;">8</td><td style="padding: 2px 5px;">• 4</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">+</td><td style="border-right: 1px dashed black; padding: 2px 5px;">4</td><td style="padding: 2px 5px;">1 • 3</td></tr> <tr><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-top: 1px solid black; padding-top: 2px;"></td></tr> </table>	T	U	T	4	8	• 4	+	4	1 • 3				<p>e: <input style="width: 100%;" type="text"/></p> <p><b>d</b></p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">T</td><td style="border-right: 1px dashed black; border-bottom: 1px solid black; padding: 2px 5px;">U</td><td style="border-bottom: 1px solid black; padding: 2px 5px;">T</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">2</td><td style="border-right: 1px dashed black; padding: 2px 5px;">7</td><td style="padding: 2px 5px;">• 8</td></tr> <tr><td style="border-right: 1px dashed black; padding: 2px 5px;">+</td><td style="border-right: 1px dashed black; padding: 2px 5px;">3</td><td style="padding: 2px 5px;">9 • 3</td></tr> <tr><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-right: 1px dashed black; border-top: 1px solid black; padding-top: 2px;"></td><td style="border-top: 1px solid black; padding-top: 2px;"></td></tr> </table>	T	U	T	2	7	• 8	+	3	9 • 3																			
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**2** Estimate and solve these subtraction problems. Remember to put the decimal point into your answers:

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**3** Bart finished his race in a time of 10.67 secs. Lisa finished in 11.24 secs. How much faster was Bart?

## Written methods – adding and subtracting decimals

- 4 You bought the following. Find the difference between the discount price and regular price for each item, then calculate your total savings. Show all your working out:

Was \$9.99

Now \$8.50

Save \$ \_\_\_\_\_

Was \$8.50

Now \$7.99

Save \$ \_\_\_\_\_

Was \$7.35

Now \$6.85

Save \$ \_\_\_\_\_

Was \$8.95

Now \$6.50

Save \$ \_\_\_\_\_

Was \$2.89

Now \$1.65

Save \$ \_\_\_\_\_

Was \$4.66

Now \$3.89

Save \$ \_\_\_\_\_

Total savings: \_\_\_\_\_

## Mental multiplication strategies – doubling strategy

5 Use the doubling strategy to solve these:

	× 2	× 4
a $13 \times 4$	<u>26</u>	<u>52</u>
b $16 \times 4$	_____	_____
c $24 \times 4$	_____	_____
d $25 \times 4$	_____	_____
e $32 \times 4$	_____	_____
f $21 \times 4$	_____	_____
g $35 \times 4$	_____	_____

To multiply by 4, double twice. To multiply by 8, double three times.



**REMEMBER**

6 Use the doubling strategy to solve these:

	× 2	× 4	× 8
a $12 \times 8$	<u>24</u>	_____	<u>96</u>
b $14 \times 8$	_____	_____	<u>112</u>
c $25 \times 8$	_____	_____	_____
d $21 \times 8$	_____	<u>84</u>	_____
e $13 \times 8$	_____	_____	_____
f $16 \times 8$	<u>32</u>	_____	_____

7 Work out the answers in your head using the appropriate doubling strategy. Use a table like the one above if it helps.

a  $18 \times 4 =$

b  $16 \times 4 =$

c  $26 \times 4 =$

d  $24 \times 8 =$

e  $15 \times 8 =$

f  $22 \times 8 =$

8 Nick's dad offered him two methods of payment for helping with a 5 week landscaping project.

**Method 1:** \$24 a week for 5 weeks.

**Method 2:** \$8 for the first week, then double the payment each week.

Which method would earn Nick the most money? Why?