## Converting Metric Measurements of Length

> I can convert metric measures involving length.

1) This table shows the average lengths of different species of insect. Complete the table.

| Average Lengths of Insects |  |  |  |
| :---: | :---: | :---: | :---: |
| Insect | Centimetres | Millimetres | Centimetres and <br> Millimetres |
| giant burrowing <br> cockroach | 8.3 cm | 83 mm | $8 \mathrm{~cm} \mathrm{3mm}$ |
| elephant beetle |  | 115 mm |  |
| honeybee |  | 15 mm |  |
| giant water bug |  | 116 mm |  |
| Hercules beetle |  | 51 mm |  |
| tarantula hawk wasp |  | 54 mm |  |

2) Use < or > to compare the lengths of the insects.

b) tarantula hawk wasp, Hercules beetle, giant burrowing cockroach

3) This table shows the average lengths of different species of reptile. The lengths have been written in three different ways.
a) Complete the table.

| Average Lengths of Reptiles |  |  |  |
| :---: | :---: | :---: | :---: |
| Reptile | Metres | Centimetres | Metres and Centimetres |
| saltwater crocodile | 4.55 m | 455 cm | 4 m 55 cm |
| American alligator | 3.4 m |  |  |
| green sea turtle | 1.12 m |  |  |
| giant tortoise | 1.48 m |  |  |
| Komodo dragon | 2.59 m |  |  |
| reticulated python | 3.95 m |  |  |

b) The average length of an adult male tiger is 3.2 m .

Sort the reptiles into the correct category:

| Shorter than a tiger | Longer than a tiger |
| :--- | :--- |
|  |  |
|  |  |



* Converting Metric Measurements of Length Answers

| Question | Answer |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | This table shows the average lengths of different species of insect. Complete the table. |  |  |  |
|  | Average Lengths of Insect |  |  |  |
|  | Insect | Centimetres | Millimetres | Centimetres and Millimetres |
|  | giant burrowing cockroach | 8.3 cm | 83mm | 8 cm 3 mm |
|  | elephant beetle | 11.5 cm | 115 mm | 11 cm 5 mm |
|  | honeybee | 1.5 cm | 15 mm | 1 cm 5 mm |
|  | giant water bug | 11.6 cm | 116 mm | 11 cm 6 mm |
|  | Hercules beetle | 5.1 cm | 51 mm | 5 cm mmm |
|  | tarantula hawk wasp | 5.4 cm | 54 mm | 5 cm 4 mm |
| 2. | Use < or > to compare the insects. |  |  |  |
|  | giant water bug | > |  | Hercules beetle |
|  | elephant beetle | > |  | honey bee |
|  | honeybee | $<$ |  | giant water bug |
|  | tarantula hawk wasp | $<$ |  | elephant beetle |
|  | giant burrowing cockroach | > |  | tarantula hawk wasp |
| 3. | Order these sets of insects from shortest to longest. |  |  |  |
| a | honey bee | elephant beetle |  | giant water bug |
| b | Hercules beetle | tarantula hawk wasp |  | giant burrowing cockroach |


| 4. | This table shows the average lengths of different species of reptile. The lengths have been written in three different ways. Complete the table. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| a | Average Length of Reptiles |  |  |  |
|  | Reptile | Metres | Centimetres | Metres and Centimetres |
|  | saltwater crocodile | 4.55 m | 455 cm | $4 \mathrm{~m} \mathrm{55cm}$ |
|  | American alligator | 3.4 m | 340 cm | 3 m 40 cm |
|  | green sea turtle | 1.12m | 112 cm | 1 m 12 cm |
|  | giant tortoise | 1.48 m | 148 cm | $\operatorname{lm} 48 \mathrm{~cm}$ |
|  | Komodo dragon | 2.59 m | 259 cm | 2 m 59 cm |
|  | reticulated python | 3.95 m | 395 cm | 3 m 95 cm |
|  | The average length of an adult male tiger is 3.2 m . Sort the reptiles into the correct category: |  |  |  |
| b | Shorter than a tiger |  | Longer than a tiger |  |
|  | green sea turtle |  | saltwater crocodile |  |
|  | giant tortoise |  | American alligator |  |
|  | Komodo dragon |  | reticulated python |  |

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1) This table shows the average lengths of different species of insect. The lengths have been written in three different ways. Complete the table.

| Average Lengths of Insects |  |  |  |
| :---: | :---: | :---: | :---: |
| Insect | Centimetres | Millimetres | Centimetres and <br> Millimetres |
| giant burrowing <br> cockroach | 8.3 cm | 83 mm | $8 \mathrm{~cm} \mathrm{3mm}$ |
| elephant beetle |  | 115 mm |  |
| honeybee | 1.5 cm |  |  |
| giant water bug |  | 51 mm | 11 cm 6 mm |
| Hercules beetle |  |  | 1 cm 2 mm |
| tarantula hawk wasp | 6.8 cm |  |  |
| mountain beaver flea |  | 84 mm |  |
| giant earwig |  |  |  |

2) Use < or > to compare the lengths of the insects.

| giant water bug | mountain beaver flea |
| :---: | :---: |
| giant earwig | honeybee |
| tarantula hawk wasp | giant water bug |

a) elephant beetle, giant earwig, honeybee, giant water bug

| Longest |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | Shortest |

b) Hercules beetle, giant burrowing cockroach, mountain beaver flea, honeybee

| Longest |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | Shortest |

4) This table shows the average lengths of different species of reptile. The lengths have been written in three different ways.
a) Complete the table.


| Average Lengths of Reptiles |  |  |  |
| :---: | :---: | :---: | :---: |
| Reptile | Metres | Centimetres | Metres and Centimetres |
| saltwater crocodile | 4.55 m | 455 cm | 4 m 55 cm |
| American alligator |  |  | 3 m 40 cm |
| green sea turtle | 1.12 m |  |  |
| giant tortoise |  |  |  |
| Komodo dragon | 2.59 m | 395 cm |  |
| reticulated python |  | 95 cm |  |
| loggerhead sea turtle |  |  | 14 m 85 cm |
| Galápagos tortoise |  |  |  |

b) The average length of a bottlenose dolphin is 2.6 m .

Sort the reptiles into the correct category:

| Shorter than a bottlenose dolphin | Longer than a bottlenose dolphin |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |

## Converting Metric Measurements of Length Answers



| 4. | This table shows the average lengths of different species of reptile. The lengths have been written in three different ways. Complete the table. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| a | Average Length of Reptiles |  |  |  |
|  | Reptile | Metres | Centimetres | Metres and Centimetres |
|  | saltwater crocodile | 4.55 m | 455 cm | $4 \mathrm{~m} \mathrm{55cm}$ |
|  | American alligator | 3.4 m | 340 cm | 3 m 40 cm |
|  | green sea turtle | 1.12m | 112 cm | 1 m 12 cm |
|  | giant tortoise | 1.48 m | 148 cm | $\operatorname{lm} 48 \mathrm{~cm}$ |
|  | Komodo dragon | 2.59 m | 259 cm | 2 m 59 cm |
|  | reticulated python | 3.95 m | 395 cm | 3 m 95 cm |
|  | loggerhead sea turtle | 0.95 m | 95 cm | om 95 cm |
|  | Galápagos tortoise | 1.85 m | 185 cm | $1 \mathrm{~m} \mathrm{85cm}$ |
|  | The average length of a bottlenose dolphin is 2.6 m . Sort the reptiles into the correct category: |  |  |  |
| b | Shorter than a bottlenose dolphin |  | Longer than a bottlenose dolphin |  |
|  | green sea turtle |  | saltwater crocodile |  |
|  | giant tortoise |  | American alligator |  |
|  | komodo dragon |  | reticulated python |  |
|  | loggerhead sea turtle |  |  |  |
|  | Galápagos tortoise |  |  |  |

## Converting Metric Measurements of Length

> I can convert metric measures involving length.

1) This table shows the average lengths of different species of insect. The lengths have been written in three different ways. Complete the table.

| Average Lengths of Insects |  |  |  |
| :---: | :---: | :---: | :---: |
| Insect | Centimetres | Millimetres | Centimetres and <br> Millimetres |
| giant burrowing <br> cockroach | 8.3 cm | 83 mm | 8 cm 3 mm |
| elephant beetle | 11.5 cm |  |  |
| honeybee |  | 116 mm | 1 cm 5 mm |
| giant water bug |  |  |  |
| Hercules beetle | 5.1 cm | 68 mm |  |
| tarantula hawk wasp |  |  | 1 cm 2 mm |
| mountain beaver flea |  |  |  |
| giant earwig | 8.4 cm |  |  |

2) Use < or > to compare the lengths of the insects.

| giant water bug |
| :--- |
| Hercules beetle |
| mountain <br> beaver flea |
| tarantula <br> hawk wasp |
| Order all eight insects from shortest to longest. |
| elephant beetle   <br> a) b) giant burrowing <br> cockroach   |
| 3) fercules beetle |

4) This table shows the average lengths of different sea creatures.

The lengths have been written in three different ways. Complete the table.

| Average Lengths of Sea Creatures |  |  |  |
| :---: | :---: | :---: | :---: |
| Sea Creature | Metres | Centimetres | Metres and Centimetres |
| minke whale | 9.61 m | 961 cm | 9 m 61 cm |
| blue whale | 28.75 m |  |  |
| bottlenose dolphin |  | 262 cm |  |
| sea snake |  |  | 1 m 35 cm |
| basking shark | 7.35 m |  | 4 m 25 cm |
| giant Pacific octopus |  |  |  |
| Maui's dolphin |  |  |  |
| Japanese spider crab | 5.51 m |  |  |

5) Sort the sea creatures into the correct category.

| Shorter than 3 metres | Between 3 and 6 metres | Longer than 6 metres |
| :---: | :--- | :---: |
|  |  |  |
|  |  |  |
|  |  |  |



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| Question | Answer |  |  |  |
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| 1. | This table shows the average lengths of different species of insect. The lengths have been written in three different ways. Complete the table. |  |  |  |
|  | Average Length of Insects |  |  |  |
|  | Insect | Centimetres | Millimetres | Centimetres and Millimetres |
|  | giant burrowing cockroach | 8.3 cm | 83mm | $8 \mathrm{~cm} \mathrm{3mm}$ |
|  | elephant beetle | 11.5 cm | 115 mm | 11 cm 5 mm |
|  | honeybee | 1.5 cm | 15 mm | $1 \mathrm{~cm} \mathrm{5mm}$ |
|  | giant water bug | 11.6 cm | 116 mm | 11 cm 6 mm |
|  | Hercules beetle | 5.1 cm | 51 mm | 5 cm Imm |
|  | tarantula hawk wasp | 6.8 cm | 68 mm | 6 cm 8 mm |
|  | mountain beaver flea | 1.2 cm | 12 mm | $1 \mathrm{~cm} \mathrm{2mm}$ |
|  | giant earwig | 8.4 cm | 84 mm | 8 cm 4 mm |
| 2. | Use < or > to compare the insects. |  |  |  |
|  | giant water bug | > |  | giant earwig |
|  | Hercules beetle | $<$ |  | elephant beetle |
|  | mountain beaver flea | $<$ |  | giant burrowing cockroach |
|  | tarantula hawk wasp | > |  | Hercules beetle |
| 3. | Order all eight insects from shortest to longest. |  |  |  |
|  | a) mountain beaver flea | b) honeybee | c) Hercules beetle | d) tarantula hawk wasp |
|  | e) giant burrowing cockroach | f) giant earwig | g) elephant beetle | h) giant water bug |



