Metric Conversion - Worksheet

Skill

Group A - Metric units of mass

Convert the metric units below:

1) $2kg$ to g

2) $3000g$ to kg

3) 3 tonnes to kg

4) $16000kg$ to tonnes

5) 5 tonnes to g

6) $8\,000\,000g$ to tonnes

7) 5.85 tonnes to kg

8) $97.8\,kg$ to g

9) $700g$ to kg

10) $5kg$ to tonnes

11) 75.2 tonnes to g

12) $0.7g$ to kg

Group B - Metric units of length

Convert the metric units below:

1) $5km$ to m

2) $600cm$ to m

3) $9m$ to cm

4) $17cm$ to mm

5) $1800mm$ to cm

6) $600m$ to km

7) $75km$ to cm

8) $3m$ to mm

9) $2.87m$ to mm

10) $95000cm$ to km

11) $0.085km$ to mm

12) $9875.2mm$ to km

Group C - Metric units of volume

Convert the metric units below:

1) $5000ml$ to l

2) $9l$ to ml

3) $32cl$ to ml

4) $1400ml$ to cl

5) $83l$ to cl

6) $70cl$ to l

7) $8.45l$ to ml

8) $16700ml$ to l

9) $53.2l$ to ml

10) $48.25l$ to cl

11) $9.8ml$ to l

12) $987.52ml$ to l

Metric Conversion - Worksheet

Applied

1)   **(a)**   A $50p$ coin has a weight of $9g$. Find the total mass of £60 worth of $50p$ coins. Give your answer in grams.

(b)   Convert your answer from part (a) to kilograms.

2)   Maggy and Lana are sisters. Maggy is $1.8m$ tall and Lana is $9cm$ taller. What is the sum of their heights?

3)   **(a)**   There is a $5l$ jug of punch at a party. Each of the 9 adults invited to the party drink $300ml$ of the punch. How many litres of punch are remaining?

(b)   2 more guests join the party and drink $24cl$ of punch each. How many litres of punch are left now?

4)   **(a)**   Andy is baking a cake and needs $400g$ of sugar to make 12 cupcakes. He has $3.2kg$ of sugar. What is the maximum number of cupcakes he can make with that amount of sugar?

(b)   Andy has $1.5l$ of milk in his fridge. To make 12 cupcakes Andy needs $200ml$ of milk. What is the maximum number of cupcakes Andy can make with $3.2kg$ of sugar and $1.5l$ of milk?

thirdspacelearning.com   Helping schools close the maths attainment gap through targeted one to one teaching and flexible resources

2

THIRD SPACE
LEARNING

Metric Conversion - Exam Questions

1) **(a)** Write $4.37m$ in centimetres.

....
(2)

(b) Write $20ml$ in litres.

....
(2)
(4 marks)

---

2) **(a)** A jug of juice is made from $300ml$ of concentrate mixed with $500ml$ of water. If $7l$ of juice is desired, how much of each ingredient is required?

....
(3)

(b) Write the ratio of water:juice in the form $1:n$.

....
(2)
(5 marks)

---

3) **(a)** Sally and Greta are sisters. Sally weighs $48kg$ and Greta is $1900g$ lighter. How much does Greta weigh?

....
(2)

(b) What is their combined weight?

....
(2)
(4 marks)

Metric Conversion - Exam Questions

4) **(a)** Sharma runs $950m$ everyday.
Work out how far Sharma runs in a week.
Express your answer in kilometres.

....
(2)

(b) Work out how far Sharma runs in a year.
Express your answer in kilometres.

....
(2)
(4 marks)

thirdspacelearning.com   Helping schools close the maths attainment gap through targeted one to one teaching and flexible resources

4

Metric Conversion - Answers

	Question	**Answer**
	Skill Questions	
Group A	Convert the metric units below: **1)** $2kg$ to g **2)** $3000g$ to kg **3)** 3 tonnes to kg **4)** $16000kg$ to tonnes **5)** 5 tonnes to g **6)** $8\,000\,000g$ to tonnes **7)** 5.85 tonnes to kg **8)** $97.8\,kg$ to g **9)** $700g$ to kg **10)** $5kg$ to tonnes **11)** 75.2 tonnes to g **12)** $0.7g$ to kg	1) $2000g$ **2)** $3kg$ **3)** $3000kg$ **4)** 16 tonnes **5)** $5\,000\,000g$ **6)** 8 tonnes **7)** $5850kg$ **8)** $97800g$ **9)** $0.7kg$ **10)** 0.005 tonnes **11)** $75\,200\,000g$ **12)** $0.0007kg$
Group B	Convert the metric units below: **1)** $5km$ to m **2)** $600cm$ to m **3)** $9m$ to cm **4)** $17cm$ to mm **5)** $1800mm$ to cm **6)** $600m$ to km **7)** $75km$ to cm **8)** $3m$ to mm **9)** $2.87m$ to mm **10)** $95000cm$ to km **11)** $0.085km$ to mm **12)** $9875.2mm$ to km	**1)** $5000m$ **2)** $6m$ **3)** $900cm$ **4)** $170mm$ **5)** $180cm$ **6)** $0.6km$ **7)** $7\,500\,000cm$ **8)** $3000mm$ **9)** $2870mm$ **10)** $0.95km$ **11)** $85\,000mm$ **12)** $0.0098752km$

THIRD SPACE
LEARNING

Metric Conversion - Answers

Group C	Work out:	
	1) $5000ml$ to l	**1)** $5l$
	2) $9l$ to ml	**2)** $9000ml$
	3) $32cl$ to ml	**3)** $320ml$
	4) $1400ml$ to cl	**4)** $140cl$
	5) $83l$ to cl	**5)** $8300cl$
	6) $70cl$ to l	**6)** $0.7l$
	7) $8.45l$ to ml	**7)** $8450ml$
	8) $16700ml$ to l	**8)** $16.7l$
	9) $53.2l$ to ml	**9)** $53\,200ml$
	10) $48.25l$ to cl	**10)** $4825cl$
	11) $9.8ml$ to l	**11)** $0.0098l$
	12) $987.52ml$ to l	**12)** $0.98752l$

thirdspacelearning.com   Helping schools close the maths attainment gap through targeted one to one teaching and flexible resources

6

THIRD SPACE LEARNING

Metric Conversion - Answers

	Question	**Answer**
	Applied Questions	
1)	**a)** A $50p$ coin has a weight of $9g$. Find the total mass of £60 worth of $50p$ coins in grams. **b)** Convert your answer from part (a) into kilograms.	**a)** $1080g$ **b)** $1.08kg$
2)	Maggy and Lana are sisters. Maggy is $1.8m$ tall and Lana is $9cm$ taller. What is the sum of their heights?	$369cm$ or $3.69m$
3)	**a)** There is a $5l$ jug of punch at the party. Each of the 9 adults invited to the party drink $300ml$. How many litres of punch are remaining? **b)** 2 more guests join the party and drink $24cl$ of punch each. How many litres of punch are left now?	**a)** $2.3l$ of punch is remaining **b)** $1.82l$ of punch is remaining
4)	**a)** Andy is baking a cake and needs $400g$ of sugar to make 12 cupcakes. He has $3.2kg$ of sugar. What is the maximum number of cupcakes he can make with that amount of sugar? **b)** Andy has $1.5l$ of milk in his fridge. To make 12 cupcakes Andy needs $200ml$ of milk. What is the maximum number of cupcakes Andy can make with $3.2kg$ of sugar and $1.5l$ of milk?	**a)** 96 cupcakes **b)** 90 cupcakes

Metric Conversion - Mark Scheme

		Question	Answer	
		Exam Questions		
1)	**(a)**	Write $4.37m$ in centimetres.	**(a)** 4.37×100 437cm	**(1)** **(1)**
	(b)	Write $20ml$ in litres.	**(b)** $20 \div 1000$ $0.02l$	**(1)** **(1)**
2)	**(a)**	A jug of juice is made from $300ml$ of concentrate mixed with $500ml$ of water. If $7l$ of juice is desired, how much of each ingredient is required?	**(a)** $7000 \div 800 = 8.75$ $300 \times 8.75 = 2625\ ml$ of concentrate $500 \times 8.75 = 4375\ ml$ of water	**(1)** **(1)** **(1)**
	(b)	Write the ratio of water:juice in the form $1:n$.	**(b)** $5:3$ $1:0.6$	**(1)** **(1)**
3)	**(a)**	Sally and Greta are sisters. Sally weighs $48kg$ and Greta is $1900g$ lighter. How much does Greta weigh?	**(a)** $48\,000g$ or $1.9kg$ seen $48000 - 1900 =$ $46100g$ or $46.1kg$ seen	**(1)** **(1)**
	(b)	What is their combined weight?	**(b)** $48 + 46.1$ $94.1kg$	**(1)** **(1)**
4)	**(a)**	Sharma runs $950m$ everyday. Work out how far Sharma runs in a week. Express your answer in kilometres.	**(a)** $950 \times 7 = 6650m$ $6650 \div 1000 = 6.65km$	**(1)** **(1)**
	(b)	Work out how far Sharma runs in a year. Express your answer in kilometres.	**(b)** 950×365 $346.75km$	**(1)** **(1)**