

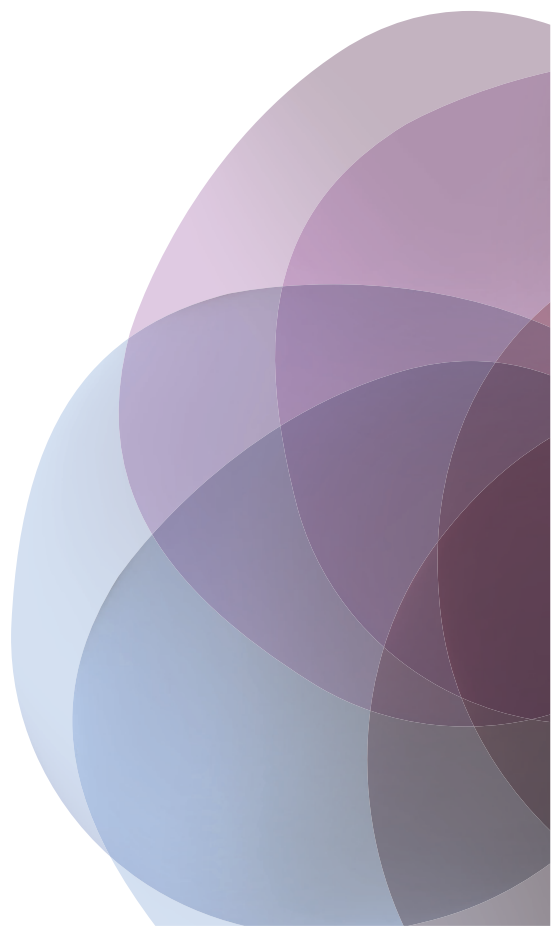
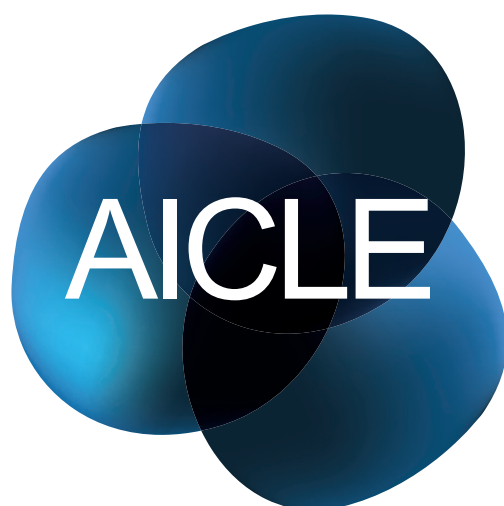
Matemáticas

Secundaria



JUNTA DE ANDALUCÍA

Inglés



Identificación del material AICLE

TÍTULO	The Metric System
NIVEL LINGÜÍSTICO SEGÚN MCER	A2.1
IDIOMA	Inglés
ÁREA / MATERIA	Matemáticas
NÚCLEO TEMÁTICO	Números
GUIÓN TEMÁTICO	<ul style="list-style-type: none">- Distinción entre magnitudes y sus unidades de medida- Utilización de las equivalencias entre las diferentes unidades para expresar una cantidad dada en cualquiera de las restantes unidades de medida- Resolución de problemas que involucren medidas- Adquisición del vocabulario básico de la unidad
FORMATO	Material didáctico en formato PDF
CORRESPONDENCIA CURRICULAR	1º de Educación Secundaria
AUTORÍA	Patricia Sánchez España
TEMPORALIZACIÓN APROXIMADA	5 sesiones
COMPETENCIAS BÁSICAS	<p>Competencia lingüística:</p> <ul style="list-style-type: none">- Conocer, adquirir, ampliar y aplicar el vocabulario del tema- Ejercitar una lectura comprensiva de textos relacionados con el núcleo temático <p>Competencia Matemática:</p> <ul style="list-style-type: none">- Distinguir entre magnitudes y sus unidades de medida.- Utilizar las equivalencias entre las diferentes unidades.- Resolver problemas matemáticos que involucren medidas <p>Competencia en tratamiento de la información y competencia digital:</p> <ul style="list-style-type: none">- Realizar las actividades online sobre el tiempo en diferentes ciudades <p>Autonomía e iniciativa personal:</p> <ul style="list-style-type: none">- Ser autónomos para realizar las actividades individuales
OBSERVACIONES	<p>Las fichas de vocabulario de trabajo en parejas, se pueden usar como introducción. El resto de actividades pueden servir como repaso de la unidad.</p> <p>Atención a la diversidad</p> <p>Ampliación: The Weather Chart</p> <p>Refuerzo: The Temperature Number Puzzle</p>

Tabla de programación AICLE

OBJETIVOS	<ul style="list-style-type: none"> - Concebir el conocimiento científico como un saber integrado, que se estructura en distintas disciplinas, así como conocer y aplicar los métodos para identificar los problemas en los diversos campos del conocimiento y de la experiencia - Desarrollar destrezas básicas en la utilización de las fuentes de información para, con sentido crítico, adquirir nuevos conocimientos. Adquirir una preparación básica en el campo de las tecnologías, especialmente las de la información y la comunicación - Comprender y expresarse en una o más lenguas extranjeras de manera apropiada 		
CONTENIDOS DE CURSO / CICLO	<ol style="list-style-type: none"> 1. Contenidos comunes referentes a la resolución de problemas y la utilización de herramientas tecnológicas 4. Desarrollo del sentido numérico y la simbolización matemática 		
TEMA	<ul style="list-style-type: none"> - Unidades de longitud. El metro. Múltiplos y submúltiplos - Cambio de unidades de longitud - Unidades de capacidad. El litro. Múltiplos y submúltiplos - Cambio de unidades de capacidad - Unidades de masa. El kilogramo. Múltiplos y submúltiplos - Cambio de unidades de masa - Sistema de medida anglosajón - Resolución de problemas 		
MODELOS DISCURSIVOS	<ul style="list-style-type: none"> - Distinguir las distintas unidades del sistema métrico decimal. - Analizar los diferentes sistemas de medida. 		
TAREAS	<ul style="list-style-type: none"> - Tarea de producción escrita: Writing Word Problems - Tarea de exposición: The Weather Chart - Crosswords - Group/Oral presentation - Weather charts 		
CONTENIDOS LINGÜÍSTICOS	FUNCIONES: <ul style="list-style-type: none"> - Comprender información general y específica de textos escritos - Escuchar y comprender información general de mensajes orales. Interactuar oralmente en situaciones habituales en la clase de matemáticas 	ESTRUCTURAS: <ul style="list-style-type: none"> Convert 3mg into grams. How many centimeters are in one meter? This will be 12 in. What is the result of ...? I got ... km What is the unit to measure...? How do you calculate this? 	LÉXICO: <ul style="list-style-type: none"> Length, area, volume, capacity, weight, metric system, meter, square meter, cubic meter, litre, gram, prefix, kilo, hecto, deka, deci, centi, mili, english system, inches, foot, feet, yard, mile, square foot, cubic foot, fluid ounce, pint, quart, gallon, pound, ton,...
CRITERIOS DE EVALUACIÓN	<ul style="list-style-type: none"> - Reconocer el metro como unidad principal de medida de longitud del sistema métrico decimal y utilizar las equivalencias que hay entre las distintas unidades de longitud - Reconocer el litro como unidad principal de medida de capacidad del sistema métrico decimal y utilizar las equivalencias que hay entre las distintas unidades de capacidad - Reconocer el kilogramo como unidad principal de medida de masa del sistema métrico decimal y utilizar las equivalencias que hay entre las distintas unidades de masa - Plantear y resolver problemas que involucren magnitudes de longitud, masa y capacidad - Dominar el vocabulario específico de la unidad en inglés - Utilizar el diccionario para mejorar la comprensión 		

THE METRIC SYSTEM

how many words do you know? and prefixes?

how many centimetres are in 1 meter?

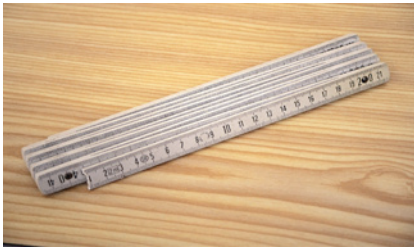
what is the unit used to measure ...? do you know any other units?



Key vocabulary

VOCABULARY PRACTICE

1. Listen and fill in the gaps with the information that your teacher will give you.



Measuring

To measure something, we use a standard _____. For example, if we are measuring the length of an object, we might use the unit “meter”. Because a meter is a standard unit, it is the same length _____.

We use different units for various _____, such as length, area, volume, weight, capacity, time and temperature. Units of measurement belong to a system of measurement. In the U.S. and the U.K., they use a system called the _____. The metric system is used throughout the world. The only type of measurement that uses the same units in both systems is _____.

_____. With the unit cancellation method, you’re not likely to make a mistake moving the decimal in the wrong direction. However, the unit cancellation method can be time-consuming. The decimal method of unit conversion is a faster method. However, it’s _____ to move the decimal in the wrong direction.

2. Complete the following crossword. Work in pairs.



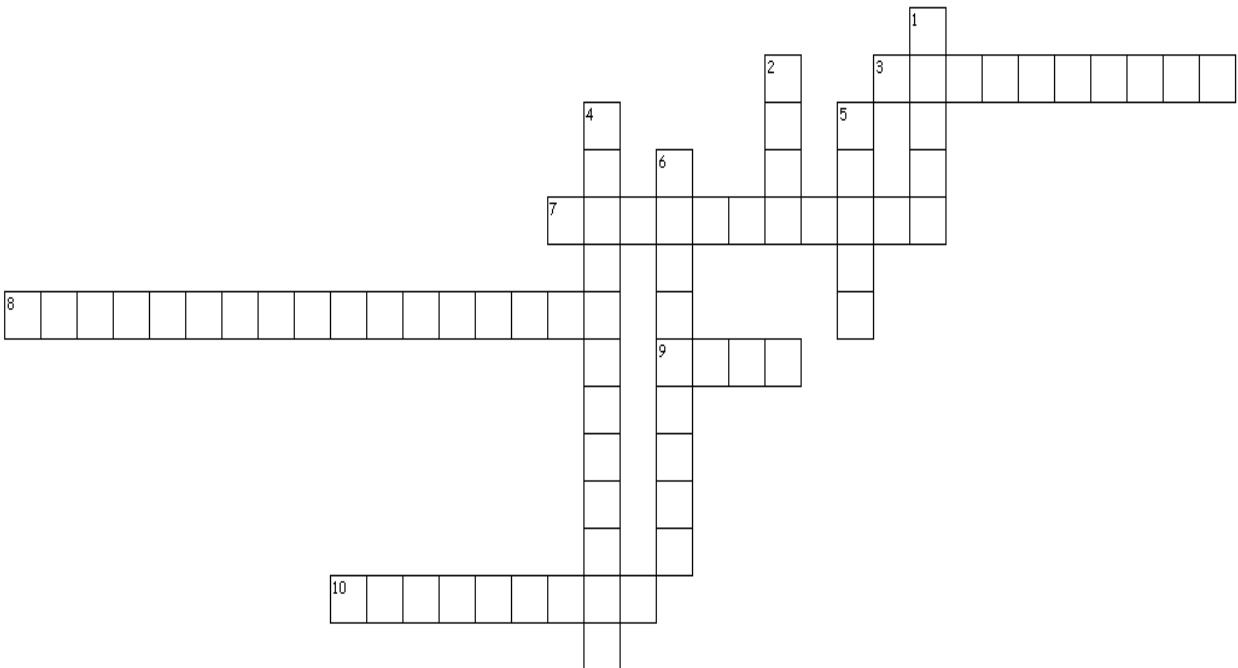
Down

1. The standard unit of length in the metric system is the _____
2. The standard unit of mass in the metric system is the _____
4. The standard unit of area in the metric system is the _____
5. The standard unit of capacity in the metric system is the _____
6. 0.001 grams

Across

3. 0.01 meters
7. The standard unit of volume in the metric system is the _____
8. 0.0001 square meter
9. 2.5 centimeters
10. 1000 liters

The Metric System



3. Match each prefix name with its corresponding number. Work in pairs.



a) The prefixes for the different units of length, volume, and mass in the metric system obey the following rules:

Prefix	Multiply by
milli-	10
centi-	0.01
deci-	0.1
deka-	1000
hecto-	0.001
kilo-	100

b) We square and cube in case of areas and volumes:

AREAS	
Prefix	Multiply by
milli-	0.0001
centi-	0.01
deci-	1000000
deka-	0.000001
hecto-	10000
kilo-	100

VOLUMES	
Prefix	Multiply by
milli-	1000000000
centi-	0.000001
deci-	0.000000001
deka-	0.001
hecto-	1000000
kilo-	1000

4. THE ENGLISH SYSTEM. Listen to your teacher to learn how to pronounce these new terms, then read the following information and check your dictionary if you need to.



1. Units of Distance

$$12 \text{ in} = 1 \text{ ft}$$

$$3 \text{ ft} = 1 \text{ yd}$$

$$1760 \text{ yds} = 1 \text{ mi}$$

$$5280 \text{ ft} = 1 \text{ mi}$$

(English-Metric conversions: 1 inch = 2.54 cm; 1 mile = 1.61 km)

2. Units of Area

$$144 \text{ in}^2 = 1 \text{ ft}^2$$

$$43,560 \text{ ft}^2 = 1 \text{ acre}$$

$$640 \text{ acres} = 1 \text{ mi}^2$$

(English-Metric conversions: 1 in² = 6.45 cm²; 1 mi² = 2.59 km²)

3. Units of Volume

$$57.75 \text{ in}^3 = 1 \text{ qt}$$

$$4 \text{ qt} = 1 \text{ gal}$$

$$42 \text{ gal (petroleum)} = 1 \text{ barrel}$$

$$32 \text{ qt} = 1 \text{ bushel}$$

(English-Metric conversions: 16.39 cm³ = 1 in³; 3.79 liters = 1 gal)

4. Units of Mass

$$437.5 \text{ grains} = 1 \text{ oz}$$

$$16 \text{ oz} = 1 \text{ lb}$$

$$2000 \text{ lb} = 1 \text{ short ton}$$

(English-Metric conversions: 453 g = 1 lb; 2.2 lb = 1 kg)

5. Units of Temperature

Fahrenheit-Celsius conversions:

$$T(^{\circ}\text{C}) = [T(^{\circ}\text{F}) - 32] \times 5/9$$

$$T(^{\circ}\text{F}) = T(^{\circ}\text{C}) \times 9/5 + 32$$

5. Find 14 words related to the English System. Work in pairs.



6. Answer the following questions about the Metric System and the English System.



- What is the official name of the modern metric system and what is its abbreviation?

- How many base units does the metric system consist of? Name them.

- Which metric system unit is preferred for measuring clothing and body measurements?

- Which is larger, a quart or a liter . . . and by how many milliliters larger is it?

- Which metric system prefix means one-thousandth?

- What is the difference between mass and weight?

THE METRIC SYSTEM PRACTICE

7. Fill in the gaps with the words given below.



The metric system

The system of measurement that scientists around the world use today is the metric system. The metric system is a _____ system, meaning that it is based on the number ten and _____ of ten, such as 100 and 1,000.

Units

1. Length (L) [typical tool used = meter stick]

Length is the _____ from one point to another. The basic unit of length in the metric system is a _____ (m).

1 meter (m) = 100 centimeters (cm)

1,000 meters = 1 kilometer (km)

1 meter (m) = 1,000 millimeters (mm)

1 centimeter = 10 millimeters (mm)

2. Volume (V) [typical tool used = graduated cylinder]

Volume is the amount of _____ an object takes up. The basic unit of volume in the metric system is a _____ (l).

1 liter (l) = 1,000 milliliters (ml) = 1000 cubic centimeters (cm³)

3. Mass (M) [typical tool used = electronic balance]

Mass is commonly used to describe the _____ of an object.

The basic unit of mass is a _____ (g).

1 kilogram (kg) = 1,000 grams (g)

1,000 milligrams (mg) = 1 gram

Making conversions

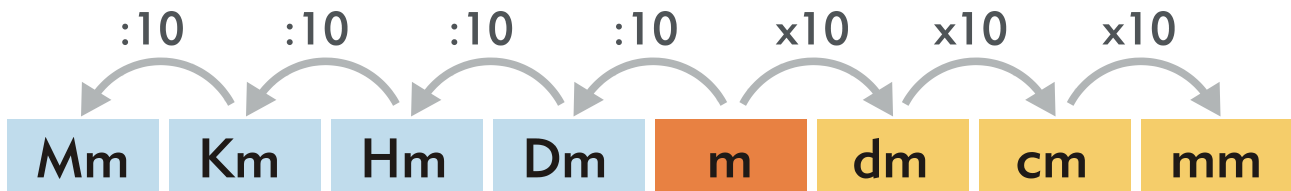
Conversions between units, is a skill needed when working with the metric system.

Example: convert 152 meters in centimeters.

Solution: $152\text{m} \times 100 \text{ cm} = 15,200\text{cm}$

meter space distance decimal multiples gram liter weight

8. Units of length. Complete the following problems showing all of your work by setting up the entire equation and using unit abbreviations for each value.



Convert each measure to mm.

1. 92 cm 1 mm = _____ mm

2. 61 cm = _____ mm

3. 51 cm = _____ mm

4. 2 mm 735 m = _____ mm

Convert each measure to cm.

5. 70 mm = _____ cm

6. 73 cm 10 mm = _____ cm

7. 946 m 6 km = _____ cm

8. 317 m = _____ cm

Convert each measure to m.

9. 7 km = _____ m

10. 79 m 300 cm = _____ m

11. 12 km = _____ m

12. 9800 cm 872 m = _____ m

Convert each measure to km.

13. 800 m = _____ km

14. 38 km 8000 m = _____ km

15. 12000 m = _____ km

16. 3000 m 243 km = _____ km

Convert each measure to cm and m.

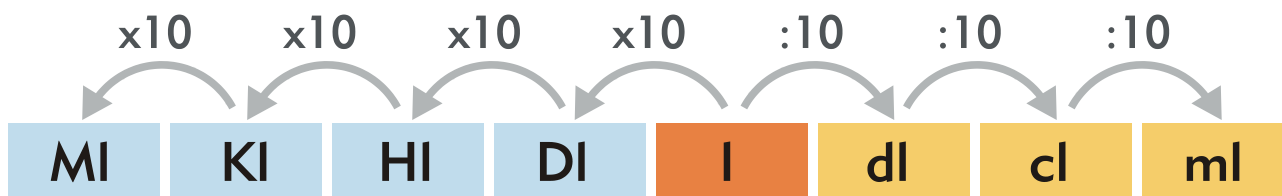
17. 8389 cm 9000 mm = _____ m _____ cm

18. 1109 cm = _____ m _____ cm

19. 727 m 1554 cm = _____ m _____ cm

20. 2238 cm = _____ m _____ cm

9. Units of volume. Complete the following problems showing all of your work by setting up the entire equation and using unit abbreviations for each value.



Convert each measure to ml.

1. $58 \text{ cl} = \underline{\hspace{2cm}} \text{ ml}$

2. $2 \text{ ml } 75 \text{ cl} = \underline{\hspace{2cm}} \text{ ml}$

3. $21 \text{ cl} = \underline{\hspace{2cm}} \text{ ml}$

4. $3 \text{ ml } 8 \text{ l} = \underline{\hspace{2cm}} \text{ ml}$

Convert each measure to cl.

5. $70 \text{ ml} = \underline{\hspace{2cm}} \text{ cl}$

6. $30 \text{ ml } 6 \text{ cl} = \underline{\hspace{2cm}} \text{ cl}$

7. $1 \text{ kl } 110 \text{ l} = \underline{\hspace{2cm}} \text{ cl}$

8. $80 \text{ ml} = \underline{\hspace{2cm}} \text{ cl}$

Convert each measure to l.

9. $6100 \text{ cl } 723 \text{ l} = \underline{\hspace{2cm}} \text{ l}$

10. $10000 \text{ ml} = \underline{\hspace{2cm}} \text{ l}$

11. $10 \text{ kl} = \underline{\hspace{2cm}} \text{ l}$

12. $11 \text{ kl } 11000 \text{ ml} = \underline{\hspace{2cm}} \text{ l}$

Convert each measure to kl.

13. $12000 \text{ l} = \underline{\hspace{2cm}} \text{ kl}$

14. $5000 \text{ l } 491 \text{ kl} = \underline{\hspace{2cm}} \text{ kl}$

15. $7000 \text{ l} = \underline{\hspace{2cm}} \text{ kl}$

16. $2000 \text{ l } 70 \text{ kl} = \underline{\hspace{2cm}} \text{ kl}$

Convert each measure to cl and l.

17. $10000 \text{ ml } 5050 \text{ cl} = \underline{\hspace{2cm}} \text{ l}$
 $\underline{\hspace{2cm}} \text{ cl}$

18. $7404 \text{ cl} = \underline{\hspace{2cm}} \text{ l } \underline{\hspace{2cm}} \text{ cl}$

19. $9000 \text{ ml } 4884 \text{ cl} = \underline{\hspace{2cm}} \text{ l}$
 $\underline{\hspace{2cm}} \text{ cl}$

20. $2522 \text{ cl} = \underline{\hspace{2cm}} \text{ l } \underline{\hspace{2cm}} \text{ cl}$

10. Units of mass. Complete the following problems showing all of your work by setting up the entire equation and using unit abbreviations for each value.



Convert each measure to mg.

1. $76 \text{ cg } 3 \text{ mg} = \underline{\hspace{2cm}} \text{ mg}$

2. $83 \text{ cg} = \underline{\hspace{2cm}} \text{ mg}$

3. $9 \text{ cg } 976 \text{ g} = \underline{\hspace{2cm}} \text{ mg}$

4. $32 \text{ cg} = \underline{\hspace{2cm}} \text{ mg}$

Convert each measure to cg.

5. $90 \text{ mg } 34 \text{ cg} = \underline{\hspace{2cm}} \text{ cg}$

6. $80 \text{ mg} = \underline{\hspace{2cm}} \text{ cg}$

7. $266 \text{ g } 9 \text{ kg} = \underline{\hspace{2cm}} \text{ cg}$

8. $3 \text{ kg} = \underline{\hspace{2cm}} \text{ cg}$

Convert each measure to g.

9. $8000 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

10. $611 \text{ g } 6,000 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

11. $696 \text{ g } 8000 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

12. $200 \text{ cg} = \underline{\hspace{2cm}} \text{ g}$

Convert each measure to kg.

13. $3000 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$

14. $673 \text{ kg } 9000 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$

15. $12000 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$

16. $567 \text{ kg } 5000 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$

Convert each measure to cg and g.

17. $6642 \text{ cg } 5000 \text{ mg} = \underline{\hspace{2cm}} \text{ g } \underline{\hspace{2cm}} \text{ cg}$

18. $5556 \text{ cg} = \underline{\hspace{2cm}} \text{ g } \underline{\hspace{2cm}} \text{ cg}$

19. $265 \text{ cg } 642 \text{ g} = \underline{\hspace{2cm}} \text{ g } \underline{\hspace{2cm}} \text{ cg}$

20. $7645 \text{ cg} = \underline{\hspace{2cm}} \text{ g } \underline{\hspace{2cm}} \text{ cg}$



11. Write the correct abbreviation for each metric unit.

- | | |
|---------------------|---------------------|
| 1) Kilogram _____ | 6) Liter _____ |
| 2) Meter _____ | 7) Kilometer _____ |
| 3) Gram _____ | 8) Centimeter _____ |
| 4) Milliliter _____ | 9) Milligram _____ |
| 5) Millimeter _____ | |



12. Try these conversions using the ladder method.

- | | |
|----------------------|-----------------------|
| 1) 2000 mg = _____ g | 9) 50 cm = _____ m |
| 2) 104 km = _____ m | 10) 5.6 m = _____ cm |
| 3) 480 cm = _____ m | 11) 16 cm = _____ mm |
| 4) 5.6 kg = _____ g | 12) 2500 m = _____ km |
| 5) 8 mm = _____ cm | 13) 65 g = _____ mg |
| 6) 5 L = _____ mL | 14) 6.3 cm = _____ mm |
| 7) 198 g = _____ kg | 15) 120 mg = _____ g |
| 8) 75 mL = _____ l | |



13. Compare using <, >, or =.

- | | |
|--------------------------|--------------------------|
| 16) 63 cm 6 m | 19) 536 cm 53.6 dm |
| 17) 5 g 508 mg | 20) 43 mg 5 g |
| 18) 1,500 ml 1.5 l | 21) 3.6 m 36 cm |

14. Conversion Challenge. Compare metric measurements.
Show all your work by identifying each step.



483 cl + 26761 cl + 3057 ml

49 l + 2087 kl + 371 l

4111 m + 5931 m + 32 mm + 4916 m

195 km + 52 km + 3 cm + 689 km

52 mg + 276 cg + 3881 g

7 cg + 46 g + 350 kg

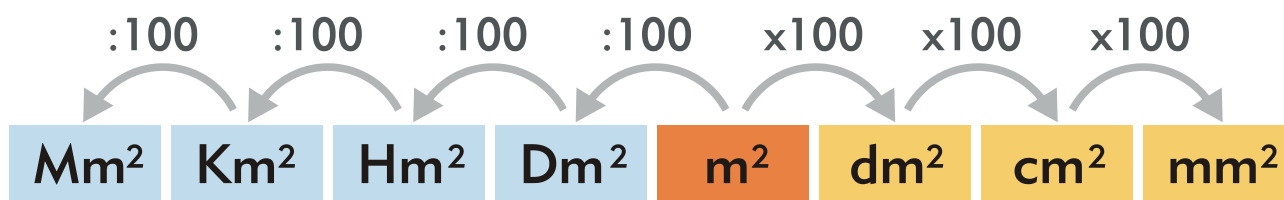
10 cm + 895 km + 442 km

51 mm + 4956 m + 2109 m

15. How much is a square meter? And a hectare? A hectare (ha) is the area of a square that measures 100 m on one side, or 10,000 m². Work in pairs.



Area of the cover of a book	_____ m ²
Area of the tabletop	_____ m ²
Area of this room	_____ m ²
Area of my house or apartment (floor space)	_____ m ²
Area of the lot on which the house sits	_____ m ²
Area of the lot on which the house sits	_____ ha



Convert into m². Show all your work explaining each step you take to convert area units.



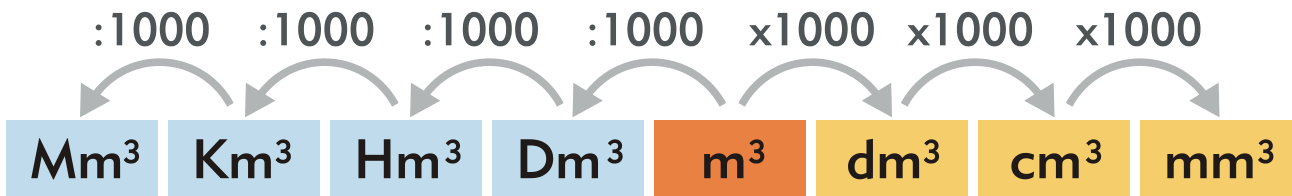
- a) 25.4 Km²
- b) 34000 dm²
- c) 157530 cm²
- d) 2.4 Hm²
- e) 2 Dam²
- f) 234971 mm²



16. How much is a liter and a cubic meter? A cubic meter is one thousand liters. You can switch between these two measures based on what you think is appropriate in a given situation. For example, if your refrigerator has a capacity of 550 liters, you know that it is about half of a cubic meter. Work in pairs.



Capacity of my refrigerator	_____ m ³
Capacity of my washing machine	_____ m ³
Capacity of my bathtub	_____ m ³
Volume of this room	_____ m ³
Volume inside the car trunk	_____ m ³
Capacity of suitcase	_____ m ³
Volume of the space underneath the kitchen table	_____ m ³
The amount of water my family uses in a month	_____ m ³



Convert into m³. Show all your work explaining each step you take to convert units of volume.



- a) 3 Dam³
- b) 0.5 Hm³
- c) 0.004 Km³
- d) 5 dm³
- e) 450 cm³



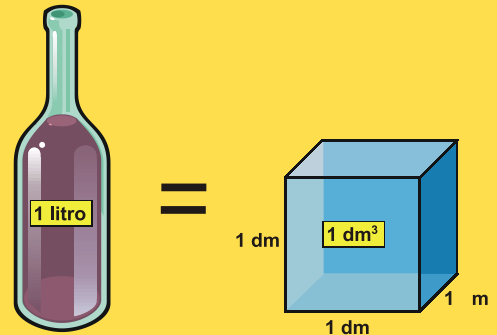
Volume and capacity equivalents



The **volume** of a solid is the amount of space it occupies and **capacity** is the amount of liquid a container can hold when it is full.

The metric unit for capacity is the **liter**, and one thousand liters is the volume of a **cubic meter**.
A cubic centimeter is the same volume as a milliliter.

Density is a measure of mass per unit of volume. The higher an object's density, the higher its mass per volume. The average density of an object equals its total mass divided by its total volume. Mass-volume conversions for water, or material of equal density, are also easy because 1 kg of water = 1 liter = $1/1000 \text{ m}^3$ and 1 g of water = 1 cm^3



17. Volume and Capacity. Complete the following statements.



a) To convert each measure into liters,

$66 \text{ cm}^3 = \underline{\hspace{2cm}}$ l, I multiply by

$14 \text{ cm}^3 = \underline{\hspace{2cm}}$ l, I multiply by

$192 \text{ cm}^3 \ 1 \text{ mm}^3 = \underline{\hspace{2cm}}$ l, I multiply by and by, and then I add them.

$5 \text{ mm}^3 \ 735 \text{ m}^3 = \underline{\hspace{2cm}}$ l, I multiply by and by, and then I add them.

b) To convert each measure to capacity,

$270 \text{ mm}^3 = \underline{\hspace{2cm}}$ cl,

$3107 \text{ m}^3 = \underline{\hspace{2cm}}$ hl,

$73 \text{ cm}^3 \ 210 \text{ mm}^3 = \underline{\hspace{2cm}}$ dl,

$96 \text{ m}^3 \ 6 \text{ km}^3 = \underline{\hspace{2cm}}$ l,

c) To convert each measure to volume.

$7 \text{ kl} = \underline{\hspace{2cm}}$ hm^3 ,

$79139000 \text{ cl} = \underline{\hspace{2cm}}$ cm^3 ,

$12 \text{ kl} = \underline{\hspace{2cm}}$ m^3 ,

$980 \text{ cl} \ 872 \text{ l} = \underline{\hspace{2cm}}$ dm^3 ,

18. Metric to English Conversion. Work in teams, in the chart below, record the measurements for several objects in your classroom. In the last columns, divide as instructed to come up with a conversion factor between inches and centimeters. Present your observations to the rest of the groups.



Item to be Measured	Inches	Centimeters	Centimeters	Inches
			↓ Inches	↓ Centimeters
Student Desktop				
Teacher's Desktop				
Width of File Cabinet				
Height of Chalkboard				

19. Solve the following word problems. Explain your reasoning.



a) Three weeks ago, Andrew's weight was two hundred eighty-five and two tenths kilograms. He has since lost nineteen and five tenths kilograms. What is his current weight?

The solution is _____ because

_____.

b) Alexis wanted to build a bookshelf for her room. She needed six boards that are each three meters long and forty-one centimeters wide. What is the area of each board?

The solution is _____ because

_____.

c) Peter lives at one end of Park Avenue. Brian lives at the other end of the avenue. It is 5.8 kilometers from one end of Park Avenue to the other. If Peter walks 2.79 kilometers toward Brian's house, how many more meters does he have to walk to get there?

The solution is _____ because

_____.

d) The miller wanted to bake a loaf of bread, but he didn't have any flour. He decided he would grind just enough for eighteen loaves. If it takes one and three-fourths kilograms of flour for two loaves, how much flour will he need?

The solution is _____ because

_____.

e) There is a jar on the cabinet by the refrigerator. If Savannah pours two hundred and eight milliliters of water in the jar six times to fill it, how many liters of water does it take to fill the jar?

The solution is _____ because

_____.

f) A three-liter bottle of Coke costs \$2.37 at the supermarket. What is the cost of the drink per liter?

The solution is _____ because

_____.

g) Matthew kept track of his weight on a calendar. On April 1 he weighed forty-six kilograms. On May 1 he weighed nine hundred grams more. By June 1 he had gained another two kilograms. What was his weight, in kilograms, on the first of June?

The solution is _____ because

_____.

h) Eric wants to fill up his car's gas tank. The tank holds 21 liters and is currently a third empty. How many liters of gas will it take to fill the tank?

The solution is _____ because

_____.

i) Magic Meals sent out free samples to introduce its new product, Sushi Soup. Each sample weighs one hundred eighty-nine grams. The post office charges thirty-nine cents for each fifty-six grams of weight. How much would Magic Meals need to spend on postage to mail out one hundred and seventy-seven free samples?

The solution is _____ because

_____.

j) Olivia was very cold. She wanted to wear her new jacket with the pink flowers on it. Her mother said that it was negative seven degrees Celsius but that it was going to be eleven degrees Celsius by afternoon. How many degrees would the temperature have to rise to reach eleven degrees Celsius?

The solution is _____ because

_____.

WRITING WORD PROBLEMS

20. Write 2 different word problems where the solution is given using the Metric System or the English system. Present the problems to your class then, listen to your classmates' problems and try to solve them.

20

There are _____ that weigh _____. Find the total _____.

The _____ Find the _____.

WEATHER CHARTS

21 A. Local weather. Use the Internet to find and complete the information missing in the following chart. Pay special attention to the units of each measure. Convert the measures given in the metric system to the English system. Work in groups, compare and contrast your observations.



Malaga, the week of _____ to _____

Date					
Time					
Barometric Pressure					
Temperature					
Relative Humidity					
Wind Direction					
Wind Speed					
Precipitation					
General Weather Conditions					

Links:

<http://www.bbc.co.uk/weather/5day.shtml?world=0198&links>
<http://weather.cnn.com/weather/forecast.jsp?locCode=SPXX0052&zipCode=332426277177>
http://www.tutiempo.net/tiempo/Malaga_Aeropuerto/LEMG.htm
http://canalmeteo.diariosur.es/portada_local.php
http://www4.terra.es/el tiempo/prevision/portada_prevision_ciudad/0,2778,30533,00.html

21 B. The weather in London. Use the Internet to find and complete the information missing in the following chart. Pay special attention to the units of each measure. Convert the measures given in the English system to the metric system. Work in groups, compare and contrast your observations.

LONDON, the week of _____ to _____

Date					
Time					
Barometric Pressure					
Temperature					
Relative Humidity					
Wind Direction					
Wind Speed					
Precipitation					
General Weather Conditions					

Links:

http://www.bbc.co.uk/weather/5day_f.shtml?world=0008
<http://weather.cnn.com/weather/forecast.jsp?locCode=UKXX0085&zipCode=3367367676>
http://uk.weather.yahoo.com/UKXX/UKXX0085/index_c.html
<http://www.worldweather.org/010/c00032.htm>

21 C. The weather in New York City. Use the Internet to find and complete the information missing in the following chart. Pay special attention to the units of each measure. Convert the measures given in the English system to the metric system. Work in groups, compare and contrast your observations.

NEW YORK, the week of _____ to _____

Date					
Time					
Barometric Pressure					
Temperature					
Relative Humidity					
Wind Direction					
Wind Speed					
Precipitation					
General Weather Conditions					

Links:

<http://news.bbc.co.uk/weather/forecast/101>
<http://weather.cnn.com/weather/forecast.jsp?locCode=USNY9472&zipCode=11040>
<http://uk.weather.yahoo.com/united-states/new-york/new-york-2459115/>
<http://www.worldweather.org/093/c00278.htm>

TEMPERATURE NUMBER PUZZLE

How much is number ...?

How many degrees are in number ...?

is this correct?
yes, it is. I don't think so.

22. Complete the Temperature Number Puzzle. Work in pairs.



	14				26		.	13		29	7	
	21	9		.								
2						8			12			11
			27	18		24			25	17	.	
	6											
					16		4		19			15
				3		.			22	1	.	
10		5					.			31		
		23					30				28	20

Down

- | | | |
|-----------------------|------------------------|------------------------|
| 1. 0 °C = _____ °F | 7. 91.4 °F = _____ °C | 14. 53.6 °F = _____ °C |
| 2. 17.6 °F = _____ °C | 8. 12.2 °F = _____ °C | 15. 28.4 °F = _____ °C |
| 3. 93.2 °F = _____ °C | 9. 42.8 °F = _____ °C | 16. 15 °C = _____ °F |
| 4. -11 °C = _____ °F | 10. 23 °F = _____ °C | 17. 68 °F = _____ °C |
| 5. 69.8 °F = _____ °C | 11. 24.8 °F = _____ °C | 18. -15 °C = _____ °F |
| 6. 50 °C = _____ °F | 12. 20 °C = _____ °F | 19. 84.2 °F = _____ °C |
| | 13. 5 °C = _____ °F | |

Across

- | | | |
|------------------------|------------------------|------------------------|
| 3. 4 °C = _____ °F | 22. 34 °C = _____ °F | 28. 25 °C = _____ °F |
| 4. 33.8 °F = _____ °C | 23. 62.6 °F = _____ °C | 29. 26.6 °F = _____ °C |
| 6. 50 °F = _____ °C | 24. 66.2 °F = _____ °C | 30. 75.2 °F = _____ °C |
| 20. 44.6 °F = _____ °C | 25. 28 °C = _____ °F | 31. 35.6 °F = _____ °C |
| 21. -3 °C = _____ °F | 26. 13 °C = _____ °F | |
| | 27. 59 °F = _____ °C | |

SELF ASSESSMENT

	ALWAYS	SOMETIMES	NEVER
LISTENING			
I can understand when someone talks about the metric system			
READING			
I can read texts about the metric system and understand the important information			
SPEAKING			
I can speak about the metric system or the English system			
WRITING			
I can write about the metric system or the English system			
VOCABULARY			
I recognize words and expressions related to the metric system and the English system			

Pictures taken from:
<http://bancoimagenes.isftic.mepsyd.es/>