



inClusion of Refugee  
ChiLdren in Education

# Play and Learn

FOR  
UPPER  
POST  
PRIMARY  
SCHOOL  
KIDS



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## Tips for the entry questionnaire with newly arrived students and their families

Date \_\_\_\_\_

School \_\_\_\_\_ Class \_\_\_\_\_

Name and surname of the student \_\_\_\_\_

Place / country and date of birth \_\_\_\_\_

**1. Schools attended before now / levels / n. of years**

\_\_\_\_\_

**2. Your favourite subject at school and the one you don't like**

\_\_\_\_\_

**3. Does anybody in your family help you study?**

\_\_\_\_\_

**4. Your teachers will be very caring with you. Will you openly ask them for help if you don't understand something?**

\_\_\_\_\_

**5. Do you consider learning host country language as a primary need? If possible, how about attending a language course to speed up learning it?**

\_\_\_\_\_

**6. Did you make friends in host country already?**

\_\_\_\_\_



**7. What do you do in your spare time?**

---

**8. At home, do you usually speak your native language or the host country one?**

---

**9. How many children are in your family?**

---

**10. Is there anything you or your family want to share with your new school?**

---

**THANK YOU FOR YOUR HELP!**

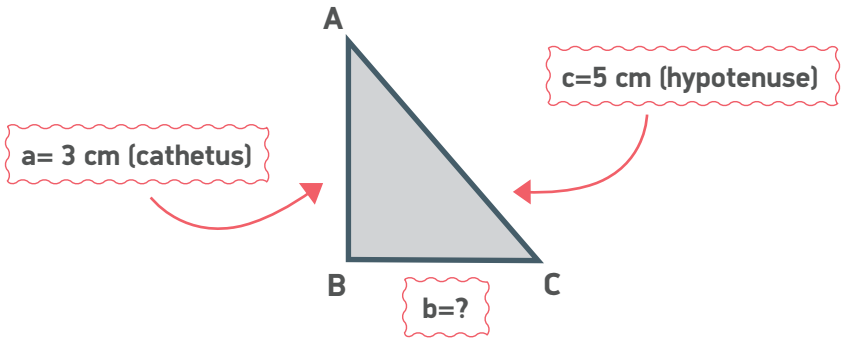




# GEOMETRY

## PYTHAGORAS'S THEOREM

- 1) Of a right triangle ABC, we know the length of the hypotenuse AC  $c=5$  cm and the length of the cathetus AB  $a=3$  cm. What is the length  $b$  of the other cathetus BC?

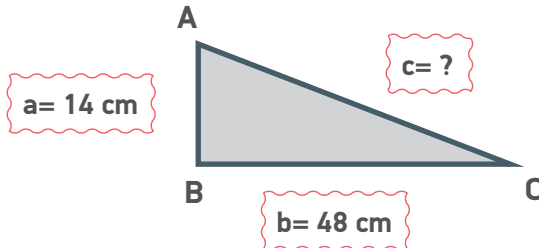


$$\text{hypotenuse}^2 = \text{cathetus } 1^2 + \text{cathetus } 2^2$$

$$c^2 = a^2 + b^2 \quad 5^2 = 3^2 + b^2 \quad 5^2 - 3^2 = b^2$$

$$\sqrt{5^2 - 3^2} = b \quad 5 - 3 = b \quad b = 2$$

- 2) The two cathetus of a right triangle are  $a=14$  cm and  $b=48$  cm. Calculate the hypotenuse  $c$ .





# ALGEBRA

## 1) Exercise with square root. (Powers/ exponents)

$$\sqrt{16} = 4$$

$$\sqrt{81} =$$

$$\sqrt{15^2+7^2} =$$

$$\sqrt{4} =$$

$$\sqrt{8^2+6^2} =$$

$$2^5 + 2^5 =$$

## 2) Least common multiple and highest common factor

LCM:	6	6	12	18	24	30	36	42	48	54	60
	15	15	30	45	60	75	90	95			

10	10	20	30	40	50	60	70	80	
12	12	24	36	48	60	72	84	96	109

5	5	10	15	20	25	30	35	40	45	50
3	3	6	9	12	15	18	21	24	27	30

HCF:

16 and 24 8

Factors of 16: 1, 2, 4, 8, 16

Factors of 24: 1, 2, 3, 4, 6, 8, 12

28 and 70

18 and 30

## DIRECT PROPORTION AND INVERSE

- 3) 6 people pay 792€ for a 12-night stay at a hotel.  
How much would 15 people pay for 8 nights?

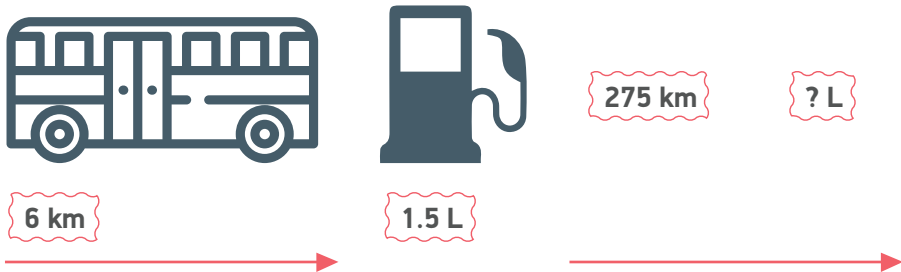
6 people 12 nights 792

15 people 8 nights x

$$\frac{6}{15} \cdot \frac{12}{8} = \frac{792}{x}$$

$$x = \frac{15 \cdot 8 \cdot 792}{6 \cdot 12} = 1320 \text{ €}$$

- 4) A bus uses 1.5L of gasoline for every 6 km. How many litres of gasoline would a bus use on a trip of 275



- 5) A truck covers a particular distance in 3 hours with the speed of 50 kilometres per hour. If the speed is increased by 25 kilometres per hour, find the time taken by the truck to cover the same distance.



## QUADRATIC EQUATIONS

6) Solve each equation for x

$$6x^2 + 11x - 35 = 0$$

---

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \quad a = 6 \quad b = 11 \quad c = -35$$

$$x = \frac{-11 \pm \sqrt{11^2 - 4 \cdot 6 \cdot (-35)}}{2 \cdot 6} = \frac{-11 \pm \sqrt{11^2 - 4 \cdot 6 \cdot (-35)}}{2 \cdot 6} = \frac{-11 \pm \sqrt{121 + 840}}{2 \cdot 6}$$

$$= \frac{-11 \pm \sqrt{961}}{2 \cdot 6} = \frac{-11 + 31}{2 \cdot 6} = \frac{20}{2 \cdot 6} = \frac{2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 3} = \frac{5}{3}$$

$$2x^2 - 4x - 2 = 0$$

---

$$2x^2 - 64 = 0$$

---

$$2x^2 + 8x = 0$$

---

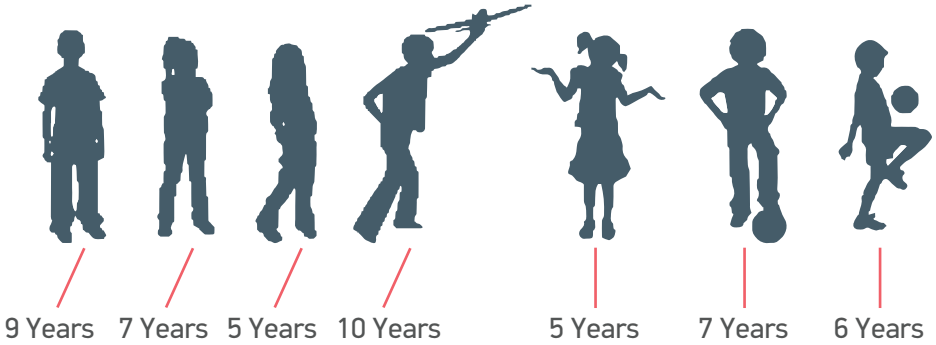


# STATISTICS AND PROBABILITY SECTION

## DATA SET CHARACTERISTICS

### ARITHMETIC MEAN

1) What is the average age of Emma and her cousins



$$\text{Arithmetic mean} = \frac{9+7+5+10+5+7+6}{7} = \frac{49}{7} = 7$$

2) What is the average number of candies?

Julia: 9 | María: 5 | Ana: 6 | Raquel: 3 | Laura: 7



### MODE

3) The number of siblings a group of friends was recorded. The data obtained is the following:

Brothers: 1, 1, 1, 1, 2, 2, 2, 3, 3, 4

What is the mode of the sequence?

1 IIII   2 III   3 II   4 I

Mo=1

Sisters: 1, 1, 2, 2, 2, 3, 3, 3, 3, 4



## MEDIAN

4) The next tables are data from perfumes sold in 2 different shops during this week

Number of perfumes sold in shop 1						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
13	26	18	21	24	33	30

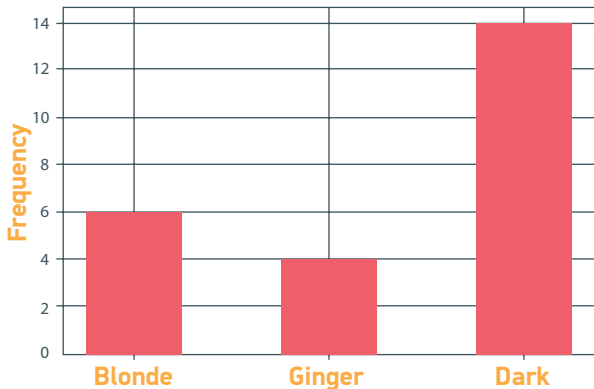
$$13 - 18 - 21 - \textcircled{24} - 26 - 30 - 33$$
$$\text{Me}=24$$

Number of perfumes sold in shop 1						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
20	19	24	21	36	60	42

## ORGANIZATIONAL DATA

### 5) Exercise one

The following bar chart represents the number of students, by hair colour, of John's class. Complete the table with the absolute frequencies corresponding to each colour and answer the questions that arise:



Hair colour	Frequency
Blond	
Ginger	
Dark	



- What type of hair is the predominant?

---

- How many students are ginger?

---

- How many students are in total?

---

## GRAPHICAL REPRESENTATION OF DATA

### 6) Exercise one

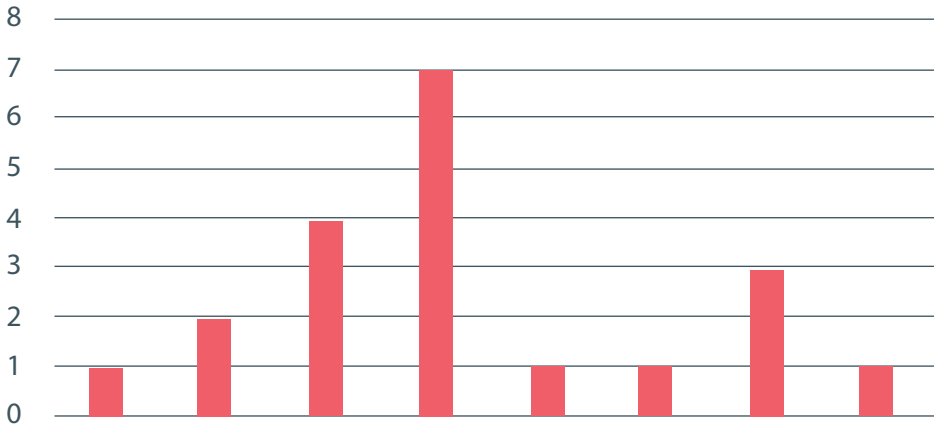
We have asked 20 people for the average number of days they practice sports per week and we have obtained the following answers:

Number of days (XI)	Absolute frequency (NI)
0	1
1	2
2	4
3	7
4	1
5	1
6	3
7	1
<b>Total</b>	<b>20</b>

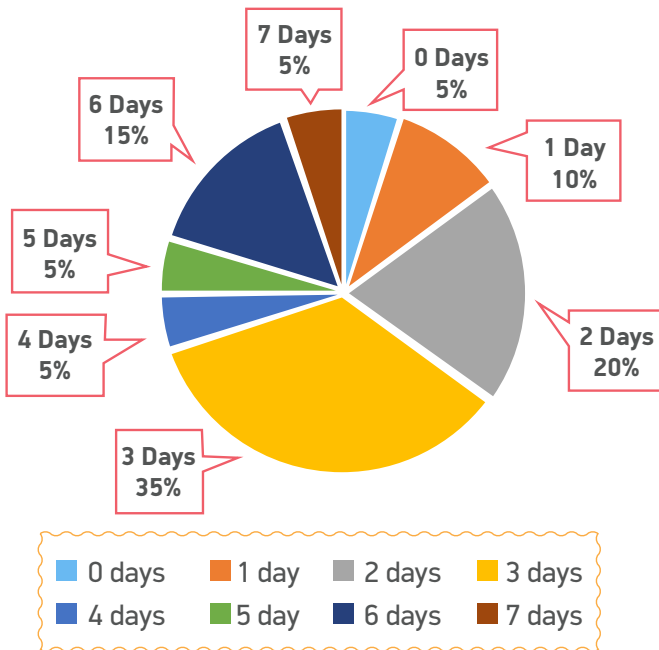


Please do the bar chart and the corresponding sector diagram, and check the results of the scene.

**BAR CHART**



**SECTOR DIAGRAM**





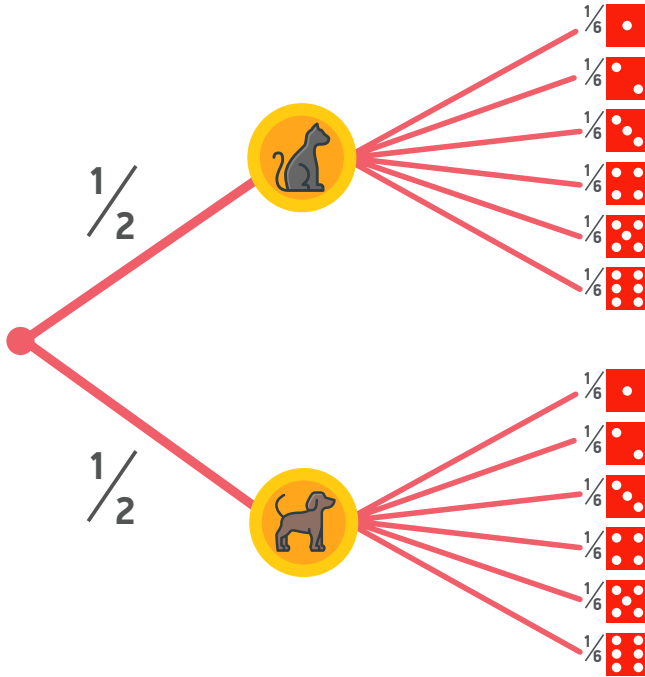
In a medical examination of 30 children, one of the data that has been taken has been the weight, in kilograms, of each one, the results obtained are reflected in the following table:

Interval	Class mark	Absolute frequency
[20, 24)	22	3
[24,28)	26	6
[28,32)	30	10
[32,36)	34	8
[36,40)	38	3
<b>Total</b>		30

Please make a bar chart and the corresponding sector diagram and check the results on the scene.

## PROBABILITY

### 7) Exercise one: Tree diagram



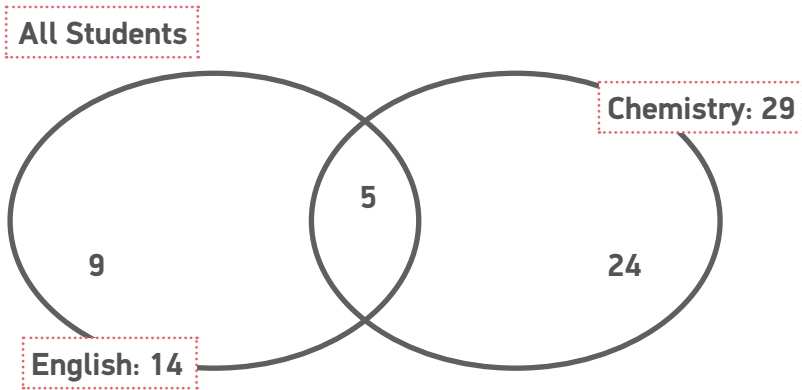
A coin has on its faces a cat and a dog. The coin is thrown twice, calculate:

- Probability of obtaining 2 cats.
- Probability of obtaining only 1 cat.



**8) Exercise two: Venn diagram**

**40 students:** 14 are taking English and 29 are taking Chemistry. If 5 students are in both classes, how many students are in neither class?



$$40 - 9 - 5 - 24 = 2 \text{ students are in neither class}$$

- a) How many are in either class?
- b) What is the probability that a randomly-chosen student from this group is only taking English?

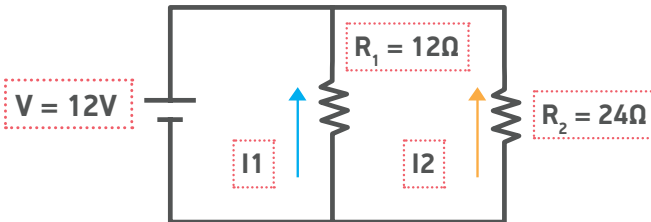
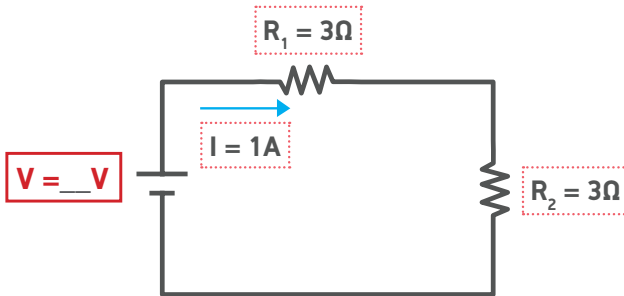
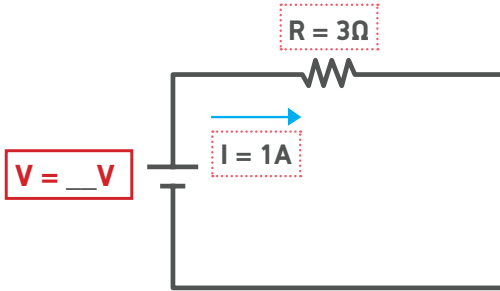


# PHYSICS

## ELECTRICITY - OHM LAW AND SERIES / PARALLEL CIRCUITS

1) Complete the missing items.

V= Voltage R=Resistance I= Current / V= Volts  $\Omega$ = Ohms A= Amperes



$R_{\text{total}} = \_ \Omega$        $I_{\text{total}} = \_ \text{ A}$

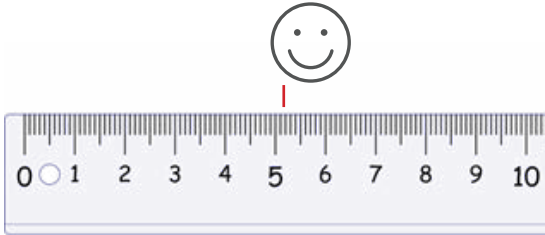
$I_1 = \_ \text{ A}$        $I_2 = \_ \text{ A}$



## MECHANICS

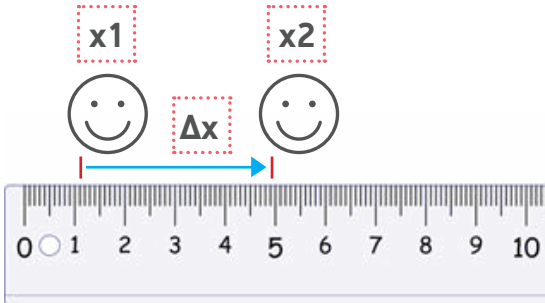
### 2) Complete the missing items

- What is the exact position of the smiley face? 😊



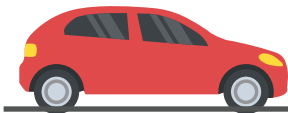
$x = \underline{\quad} \text{ cm}$

- Find the  $\Delta x$



$\Delta x = \underline{\quad} \text{ cm}$

- Which is the average speed of the car?



Total distance = 120 km

Time = 3 hours

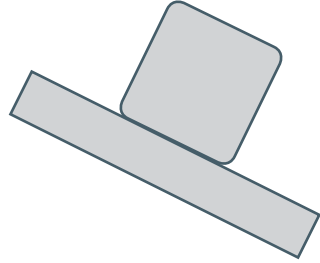
Average speed =  $\underline{\quad} \text{ km/h}$



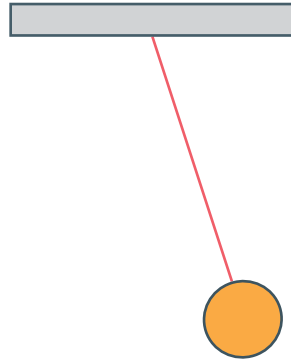
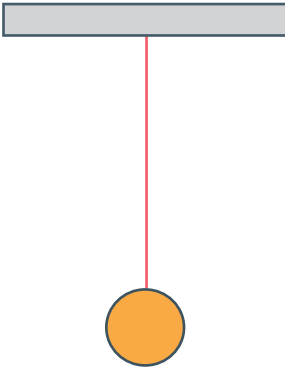
## FORCES

3) Draw the Forces (  $\rightarrow$   $\leftarrow$   $\uparrow$   $\downarrow$  )

a)



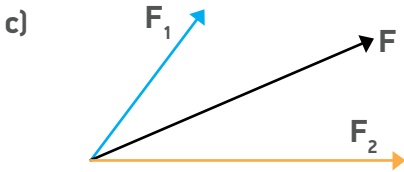
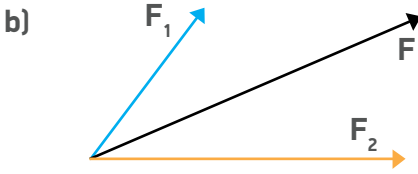
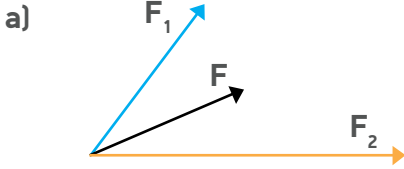
b)





4) Circle the correct answer

Which of the below is the correct **resultant force (F)** of  $F_1$  and  $F_2$  ?



5) Calculate the resultant Force (F)





6) Complete the forces with arrows (→ and ←)



7) Calculate the acceleration (a) of the car



$a = \text{___} \text{ms}^{-2}$



## GEOGRAPHY

1) Circle the correct answer



• Is it day or night at Paris?



• What is the season in Paris?



Winter



Spring



Summer



Autumn

2) Match the famous landmarks to the cities they are located in:



LONDON



PARIS



NEW YORK



CAIRO

ROME



ATHENS



3) Write the names of the 7 Continents on the map.

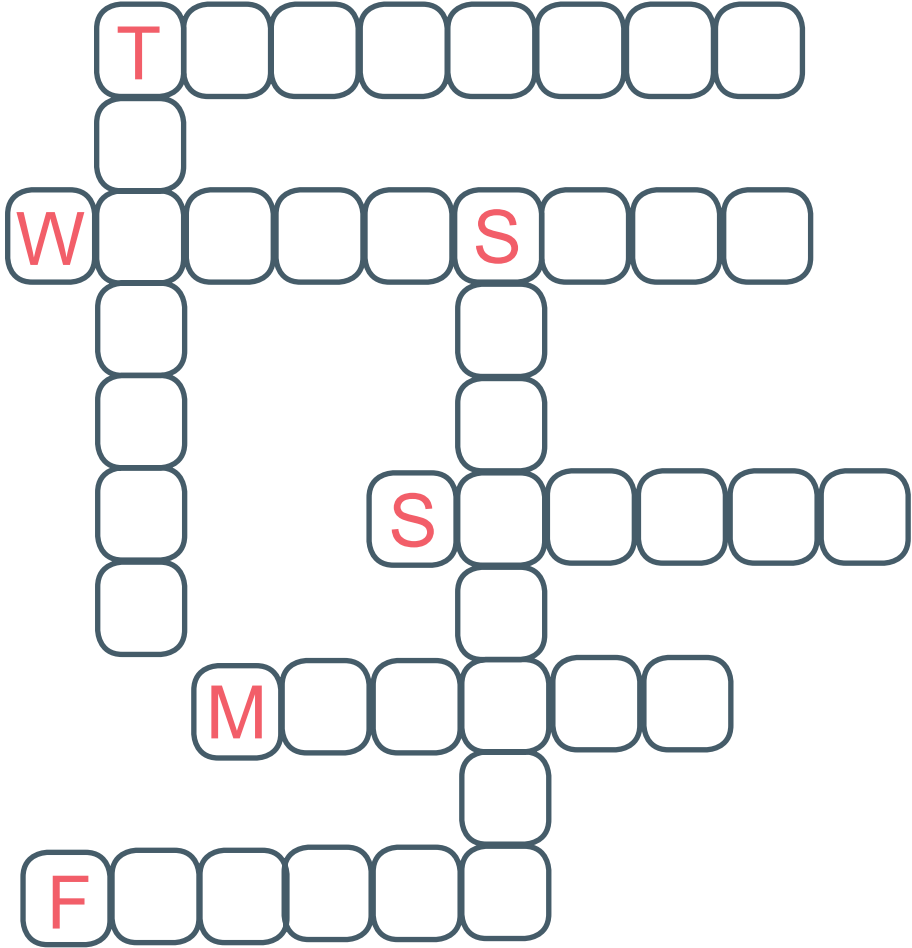
South America, Africa, Antarctica, Europe, Asia,  
North America, Oceania





## ELEMENTS OF ENGLISH

1) Complete the crossword with the days of the week.





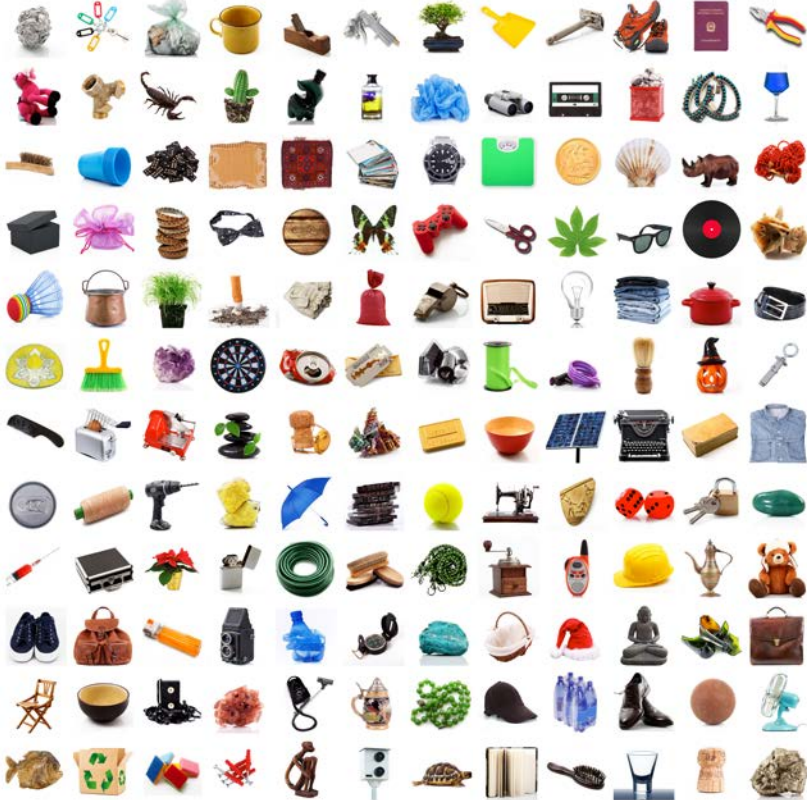
**2) Form the questions.**

- the sun / to go / around the earth  
Does the sun go around the earth ?
- how / you / to feel  
\_\_\_\_\_?
- you / to speak / English  
\_\_\_\_\_?
- why / not to like / you / ice-cream  
\_\_\_\_\_?

**3) Fill in the verbs into the gaps**

- We like the food today (to like)
- I usually \_\_\_\_\_ English with my friends. (to speak)
- She \_\_\_\_\_ really nice hair! (to have)
- I \_\_\_\_\_ very happy to see you! (to be)

4) What do you see in the picture?  
Pick and write 10 objects of the picture.



1) \_\_\_\_\_

6) \_\_\_\_\_

2) \_\_\_\_\_

7) \_\_\_\_\_

3) \_\_\_\_\_

8) \_\_\_\_\_

4) \_\_\_\_\_

9) \_\_\_\_\_

5) \_\_\_\_\_

10) \_\_\_\_\_





## ICT

### 1) Microsoft Word and Text Editing

Follow the steps in order to complete the exercise

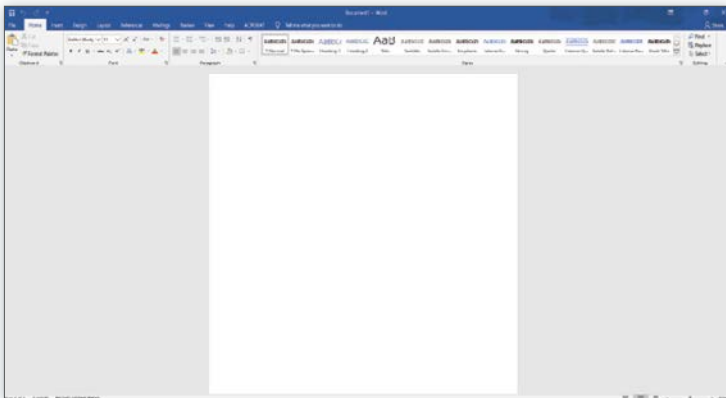
i) Open the computer



ii) Open Microsoft Word

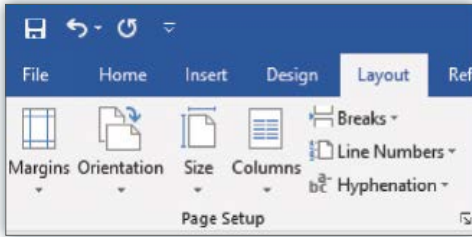


iii) Create a new document






iv) Set the margins of the document to 4 cm on both sides



v) Type in the following text applying all the modifications

Font: Calibri (Body)  
Size: 11 or 12

Use the: **B** *I* U ,  , 

Center your content on the page: 

**Hakuna Matata!**

What a wonderful phrase!

**Hakuna Matata!**

Ain't no passing craze

*It means no worries*

For the rest of the days

It's our problem-free philosophy

**Hakuna Matata!**



vi)  → On Desktop with File name: **HakunaMatata\_Your Name**



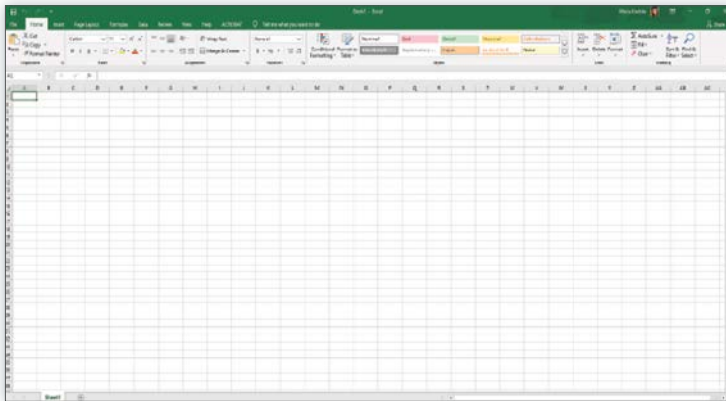
## 2) Excel, using cell references and creating a pie chart

Follow the steps in order to complete the exercise

### i) Open Microsoft Excel



### ii) Create a new book



### iii) Insert the following data

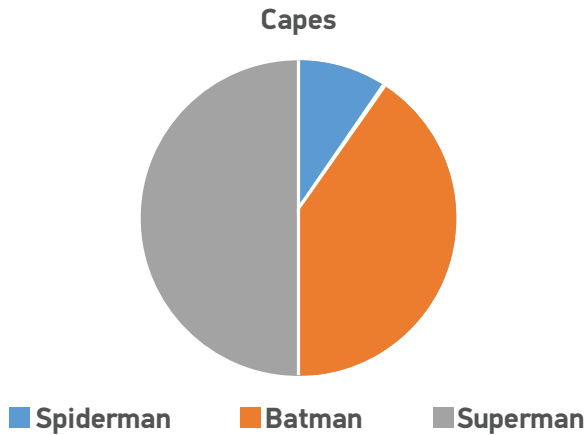
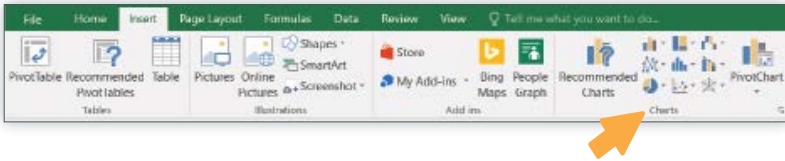
	A	B	C	D	E
1	Superhero costumes				
2					
3		Spiderman	Batman	Superman	
4	Capes	1	4	5	
5					
6	Total number of capes				




iv) Calculate the total number of capes using cell references

C6					=B4+C4+D4
	A	B	C	D	E
1	Superhero costumes				
2					
3		Spiderman	Batman	Superman	
4	Capes	1	4	5	
5					
6	Total number of capes		10		
7					

v) Create a pie chart using the given data




vi)  → On Desktop with File name: **Superhero\_Your Name**



### 3) Using the Internet and Google Maps

i) Find your country in Google Maps and take a screenshot of your hometown



ii)  Save the screenshot on the Desktop with file name:  
**Your Hometown\_Your Name**



## COMMUNICATION AND SOCIAL SKILLS

	Advanced Level	Intermediate level	Basic Level
Attention	The student stays focused and completes the tasks in a reasonable time frame.	The student stays focused with minor delays in filling out the items and completing the tasks.	The student does not stay steadily focused on the tasks and delays filling out the items and completing the tasks.
Initiation	The student asks for help and guidance effortlessly.	The student asks for help and guidance putting in a lot of effort.	The student does not ask for help or guidance on his/her own .
Communication	The student uses language for different functions and has strong communication skills. The student uses the host country's language in some situations in a relevant way.	The student uses language for different functions and has some communication skills. The student uses the host country's language in few situations and not always in a relevant way.	The student uses language for specific functions and does not put his/her communication skills in practice. The student does not use the host country's language in any situation.



<b>Basic Rules and Conventions</b>	Knows the basic rules of coexistence and puts them in practice in all situations ( kindness, "please and thank you", avoids insults etc. ).	Knows the basic rules of coexistence and puts them in practice discontinuously (kindness, "please and thank you", avoids insults etc. ).	Knows some of the basic rules of coexistence and puts them in practice in limited situations ( kindness, "please and thank you", avoids insults etc. ).
------------------------------------	---	--	---

**1) Did you observe any of the following while the student was completing the questionnaire?**

- Student completed the questionnaire effortlessly, needing no help
- Student did not ask for help and delayed filling out a section or more sections
- Student did not ask for help and did not fill all sections of the questionnaire

**2) Did you observe any of the following while the student was asked to fill in information about his/her self?**

- Student was familiar with all information requested
- Student was not familiar with the information requested but asked for help
- Student was not familiar with the information requested and did not ask for help



**3) Did you observe any of the following while the student was asked to complete the exercises?**

- Student completed the majority of the exercises effortlessly
- Student completed the exercises with delays
- Student completed some of the exercises with significant delays

**4) Which language did the student use to communicate with the educator?**

- Native language
- Host country language
- English
- Other \_\_\_\_\_

**5) Did you observe any of the following while the student was completing the questionnaire and the exercises of the diagnostic tool?**

- The student avoids eye contact and looks stressed and nervous
- The student looks timid
- The student looks comfortable



**inClusion of Refugee  
ChiLdren in Education**



# Play and Learn



[circle-project.eu](http://circle-project.eu)



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