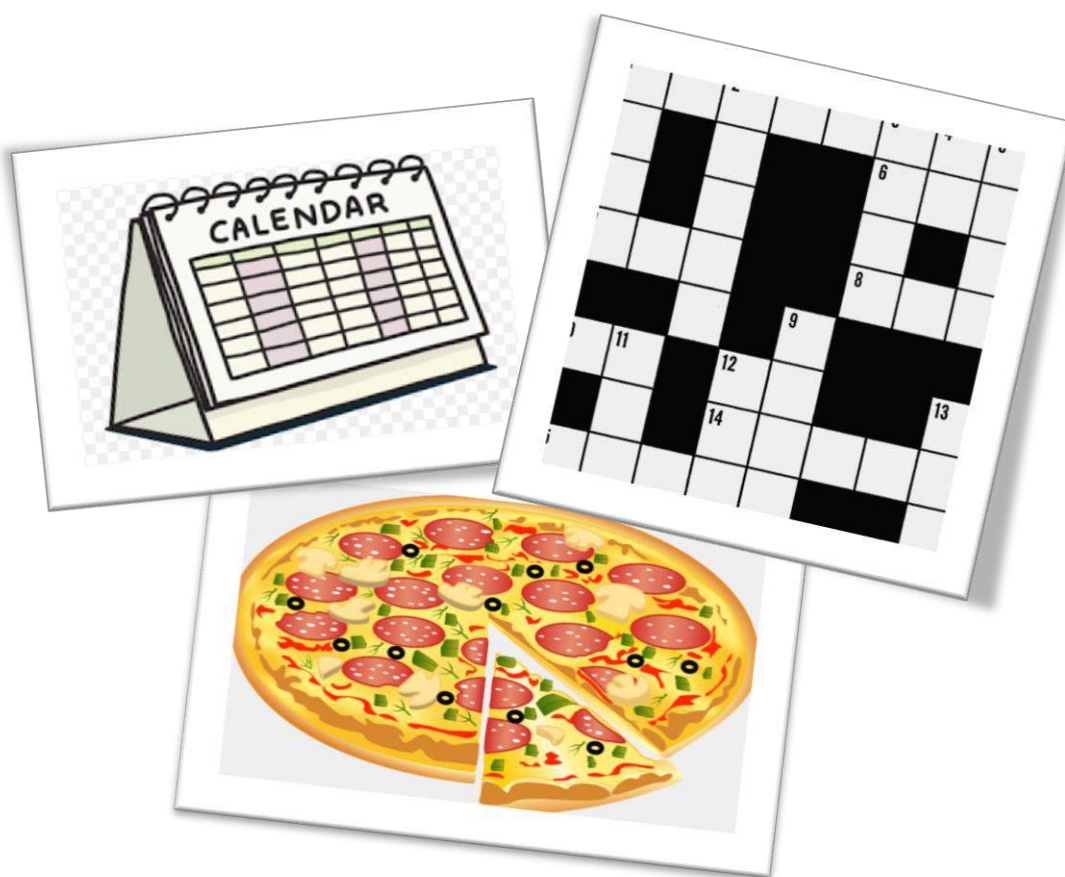


# ftit KULJUM

## matematika għal kulhadd

Tasks for Year 5 and Year 6



SCIENCE CENTRE  
PEMBROKE MALTA



MINISTRY FOR EDUCATION AND EMPLOYMENT  
DIRECTORATE FOR LEARNING AND ASSESSMENT PROGRAMMES

## PIZZA CHALLENGE



- The word 'Pizza' was first documented in the year 997 in Gaeta in Italy.
- Street vendors in Naples sold flatbreads with toppings for many years.
- Baker Raffaele Esposito from Naples is said to be the father of modern 'Pizza'.
- The legend says that Raffaele was called to make some pizza for the visit of King Umberto and Queen Margherita of Italy in the late 1889.
- Raffaele made a special pizza with white cheese, green basil and red tomato to represent the colours of the Italian flag and named the pizza 'Pizza Margherita' in the queen's honour.
- Today there are various types of pizza with different toppings. Amongst the favourites are the Margherita, Quattro Stagioni, Marinara, Funghi and Capricciosa.

## Ingredients to make a 12-inch (30cm) pizza dough.

2 ½ teaspoons active dry yeast

½ cup (125 ml) water (95 to 110 F)

½ teaspoon sugar

½ teaspoon salt

1 tablespoon vegetable/olive oil

1 ½ cups (200 g) all-purpose flour (approximately)

(<https://www.thespruceeats.com/12-inch-pizza-crust-427787>)

## Let's cost the pizza dough!

Item	Mass (Weight)	*Price	Cost
flour	800 grams	€0.85	<b>21c</b>
yeast	55 grams (5 packets of 11 g each)	€1.15	<b>23c</b>

*\*Prices of ingredients can be obtained from local online supermarkets.*

## Cost of pizza dough

1. **200 grams flour** @ 85c per 800 grams.

85c			
200 g	200 g	200 g	200 g

$$85c \div 4 = 21 \frac{1}{4} \text{ (21c to the nearest cent)}$$

2. **2 ½ table yeast** (approximately 11 g or 1 packet) @ €1.15 per 55 grams.

$$€1.15 \div 5 = \mathbf{23c}$$

## Total for a 12-inch-pizza dough

$$\mathbf{21c + 23c = 44c}$$

Create a Pizza with your favourite toppings and name it.

List and calculate the cost of each ingredient.

Calculate the total cost of your pizza.

Item	Mass (Weight)	*Price	Cost
flour			
yeast			
tomato sauce (bottle)			
mozzarella/other cheese			
<b>Total Cost</b>			

*\*Prices of ingredients can be obtained from local online supermarkets.*

If someone in your family makes a different pizza, work out the difference in price. It is also interesting to explore/discuss the reason for the price difference.

## Pizza Fun Facts

- The word 'Pizza'.

Pizza comes from the Latin root word Picea which means the blackening of crust by fire.

- Pizzerias

17% of all restaurants in the world are Pizzerias.

36% of all the pizza orders want pepperoni topping.

The average pizzeria uses roughly 55 pizza boxes per day.

- Largest Pizza

According to the Guinness Book of Records, the largest recorded pizza ever baked was 37.4 m in diameter and made at Norwood Hypermarket, Norwood, South Africa, on 8 December 1990. It weighed over 20 173 kg, and was topped with 2923.4 kg of sauce, 4252.4 kg of cheese and 1082.7 kg of pepperoni. It was eventually cut into 94 248 slices!

- Fastest Pizza

The world's fastest pizza maker can make 14 pizza in 2 minutes and 35 seconds.

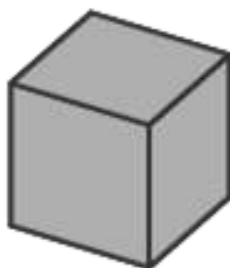
- You can order pizza from space.

Pizza Hut became the first restaurant to deliver a pizza to space when it rocketed a pizza to astronaut Yuri Usachov at the International Space Station in 2001. The pizza was topped with extra spices (since taste buds are dulled in space) and salami, so it wouldn't mould. Pizza Hut paid the Russians \$1 million to transport the pizza and then made a commercial out of it.

## Truncated Cubes

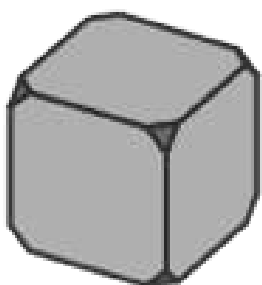
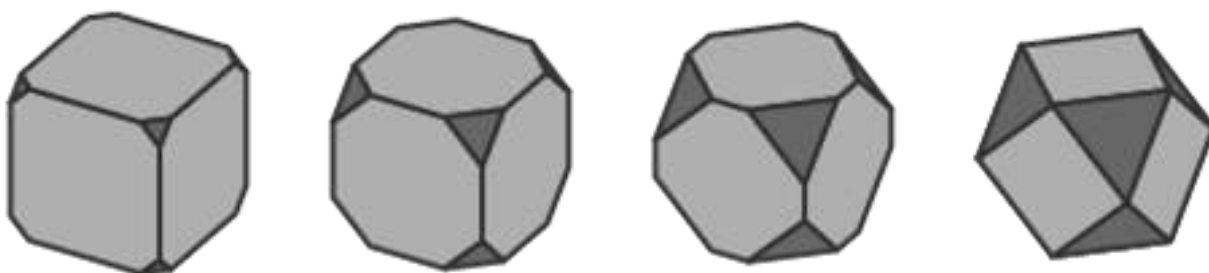
A cube has **6 faces**, **8 vertices** and **12 edges**.

This is a **cube** with light grey faces.



When the corners are cut off, they reveal dark grey faces.

Here are four truncated (cut) cubes.



This first truncated cube has **14 faces**.

It has **6 octagonal** (8 sides) **light grey faces**.

It has **8 triangular dark grey faces**.

It has **36 edges** and **24 vertices**.

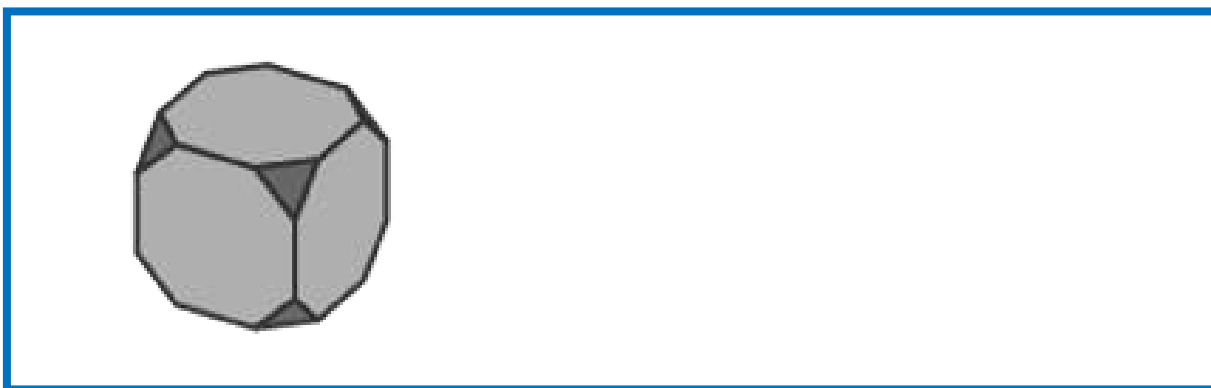
**Task:** Look carefully at the other truncated cubes.

How many **faces** does each 3-D **shape** have in **total**?

What **shape** are the **light grey faces**? How many are there?

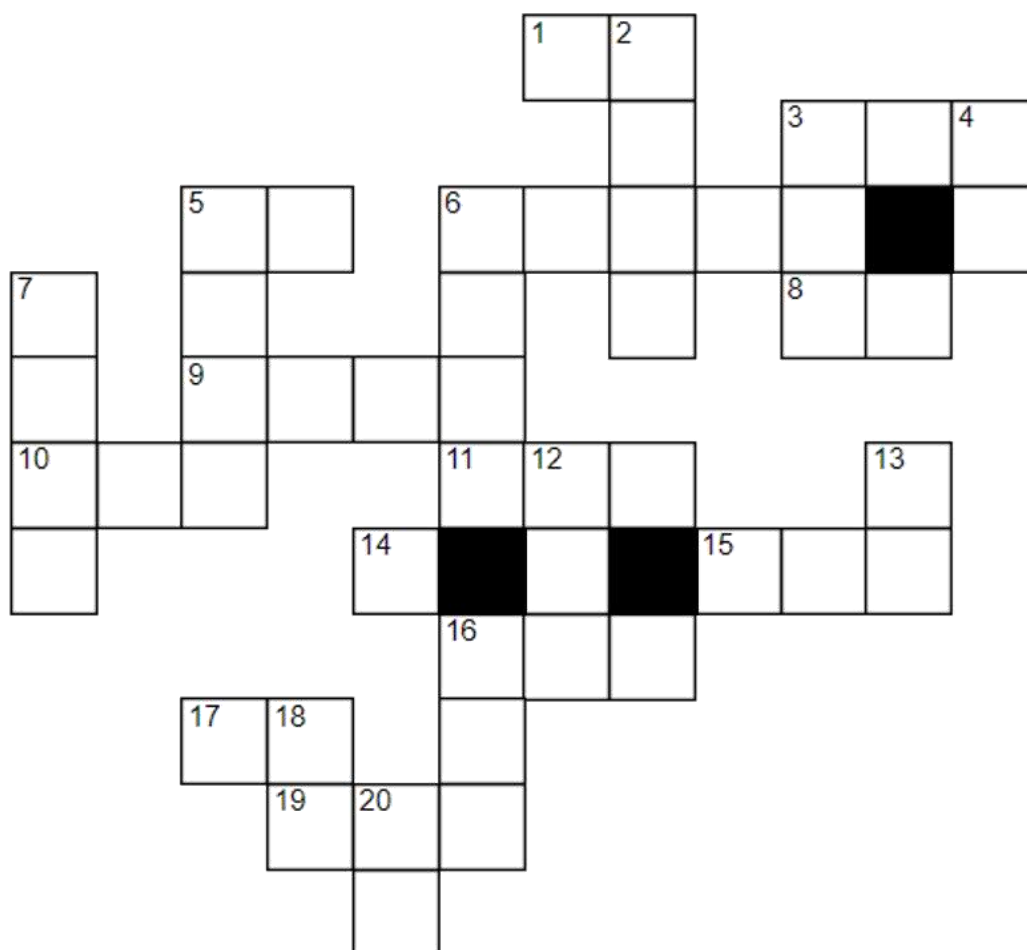
What **shape** are the **dark grey faces**? How many are there?

How many **edges** and **vertices**?



## Number Crossword Puzzle

Fill in using numbers.



### ACROSS

1. three quarters of 104
3.  $97 \times 7$
5. the first 2-digit number which is a multiple of 3 and 5
6. 802 multiplied by 35
8. the last multiple of 5 before 100
9.  $6324 - 4208$
10.  $1 \cdot 5$  multiplied by 100
11.  $114 \times 4$
14. the remainder when 25 is divided by 3
15. 940 divided by 4
16. double 75
17. two fifths of 115
19. 50 more than 425

### DOWN

2. 8315 rounded to the 100
3. 1218 divided by 2
4. 21, 39, 30 added together
5. 1415 rounded to the nearest 10
6.  $5900 - 3136$
7.  $4291 + 5222$
12. one third of 1695
13. half of 130
16. half of 350
18. 8 squared
20. 684 divided by 9



## Calendar Challenge

These are 7 months of a particular year.

The names of the months are missing and they are not in order.

Can you figure out the **7 months** below?

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

What year is this?

How did you find out?

## EXPLORE 2020

### Why is 2020 a special year?

- 2020 is a new decade. A decade is a period of 10 years.
- People born on the 29<sup>th</sup> February can celebrate their birthday on the actual day.
- 2020 is like 1818 or 1919. The first 2 digits match the second 2-digits. This happens only once in a century. A century is hundred years.
- Many dates of official and non-official holidays will fall on either Friday, Saturday, Sunday or Monday.

You can check it out.

**Write down 2 more facts about 2020.**

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1	<p>Is 2020 a leap year? Why?</p> <p>Which is the next leap year?</p>	<hr/> <hr/> <hr/> <hr/> <div style="border: 1px solid black; width: 150px; height: 50px; margin: 10px auto;"></div>
2	<p>How many more leap years will there be in the next 100 years?</p> <p>List them all.</p>	<div style="border: 1px solid black; width: 150px; height: 50px; margin: 10px auto;"></div> <hr/> <hr/> <hr/> <hr/> <hr/>
3	<p>Is an ordinary year and/or a leap year exactly 52 weeks long?</p> <p>Work it out and explain why?</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 10px 20px;">Yes</div> <div style="border: 1px solid black; padding: 10px 20px;">No</div> </div>
4	<p>On which day is/was your birthday this year?</p>	
5	<p>How many days/months/years till your next birthday?</p>	

6	Which months have 5 Wednesdays?	
7	Which months start on a Tuesday?	
8	Which is the 100 <sup>th</sup> day of the year in 2020? Show your work.  Is this date always the 100 <sup>th</sup> day of the year?	
9	What date marks the second half of the year?	
10	<p>One year is full of celebrations. Some are very popular like St <b>Valentine's Day (14<sup>th</sup> February)</b>, while others are not so popular.</p> <p>Did you know that <b>15<sup>th</sup> May</b> is <b>International Day of Families</b>? Also, to celebrate brothers' and sisters' relationships the 31<sup>st</sup> May is Siblings Day.</p> <p>We encourage you to do some research to learn more about other celebration days which have a special meaning to you, your family and your friends.</p>	

**Answers** for all tasks in this booklet are available on <https://primarymaths.skola.edu.mt/ftit-kuljum/>.