



**UNICUS  
OLYMPIADS**

**#UnicusIsUnique**

# Sample Paper



**Class 2**

## Unicus Global Math Olympiad (UGMO)

Time: 60 minutes

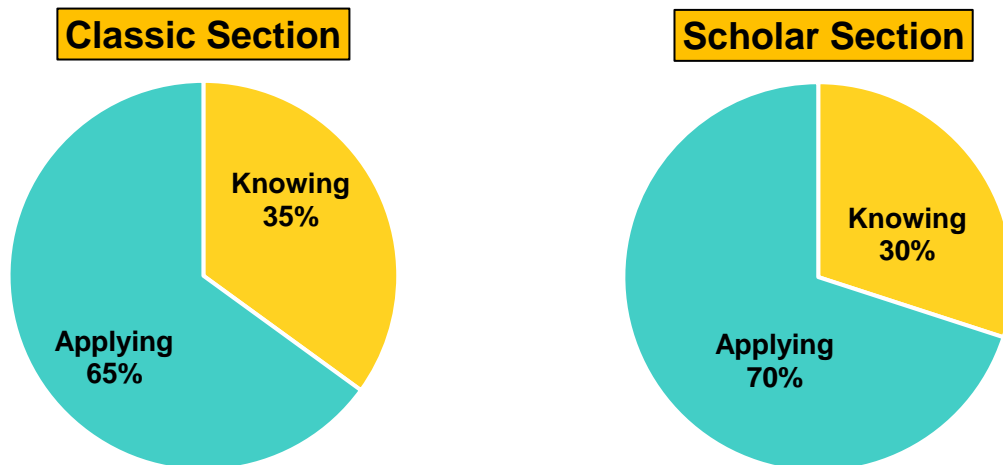
| Pattern and Marking Scheme |                 |                    |             |
|----------------------------|-----------------|--------------------|-------------|
| Section                    | Total Questions | Marks per Question | Total Marks |
| Classic Section            | 20              | 1                  | 20          |
| Scholar Section            | 10              | 2                  | 20          |
| <b>Grand Total</b>         | <b>30</b>       |                    | <b>40</b>   |

## Unicus Global Mathematics Olympiad (UGMO)

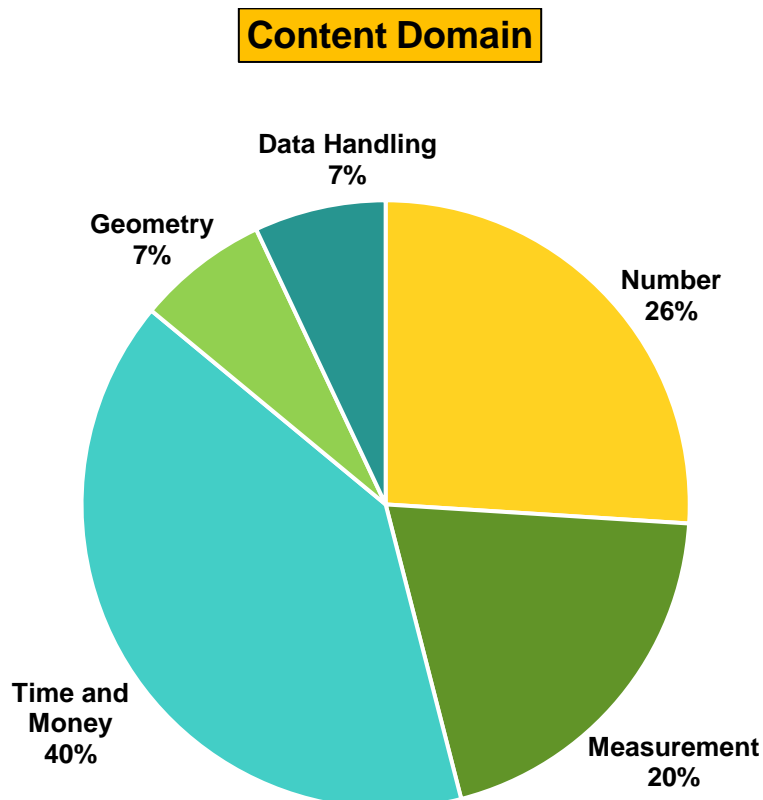
The **Unicus Global Olympiad** is organised around two dimensions:

1. Content dimension, specifying the subject matter domains to be assessed
2. Cognitive dimension, specifying the thinking processes to be assessed

### Target percentages of the question paper devoted to cognitive domains



### Target percentages of the question paper devoted to content domains

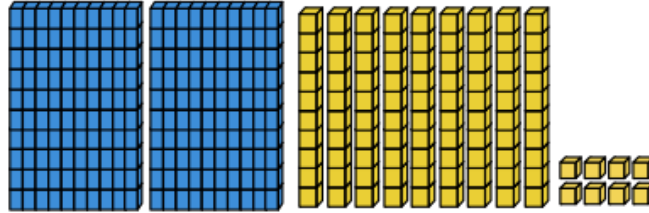


For more details, visit <https://www.unicusolympiads.com/>.

## Classic Section (Each Question is 1 Mark)

|                            |                        |
|----------------------------|------------------------|
| Cognitive Domain: Applying | Content Domain: Number |
|----------------------------|------------------------|

1. What is the number name of the number shown in the picture?



- a. **Two hundred eighty-nine**  
 b. **Two hundred eighty-eight**  
 c. **Two hundred ninety-eight**  
 d. **Eight hundred ninety-two**

|                            |                        |
|----------------------------|------------------------|
| Cognitive Domain: Applying | Content Domain: Number |
|----------------------------|------------------------|

2. There are 27, 34 and 29 mangoes respectively in three mango trees in a farm. What is the total number of mangoes in the three trees altogether?

a. **61**

b. **63**

c. **70**

d. **90**

|                            |                        |
|----------------------------|------------------------|
| Cognitive Domain: Applying | Content Domain: Number |
|----------------------------|------------------------|

3. A gardener planted 13 rows of 8 saplings each. How many saplings were planted in all?

a. **84**

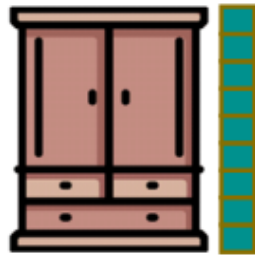
b. **94**

c. **98**

d. **104**

|                                   |                                    |
|-----------------------------------|------------------------------------|
| <b>Cognitive Domain: Applying</b> | <b>Content Domain: Measurement</b> |
|-----------------------------------|------------------------------------|

4. Fill in the blank:  
The cupboard is \_\_\_ units tall.



Each ■ = 7 units

- |              |              |
|--------------|--------------|
| a. <b>16</b> | b. <b>63</b> |
| c. <b>70</b> | d. <b>90</b> |

|                                  |                                    |
|----------------------------------|------------------------------------|
| <b>Cognitive Domain: Knowing</b> | <b>Content Domain: Measurement</b> |
|----------------------------------|------------------------------------|

5. How much do the given vegetables weigh altogether?



648 g

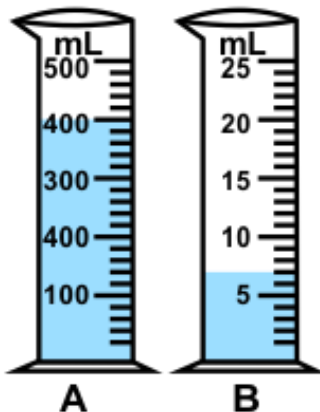


595 g

- |                      |                      |
|----------------------|----------------------|
| a. <b>1 kg 133 g</b> | b. <b>1 kg 143 g</b> |
| c. <b>1 kg 233 g</b> | d. <b>1 kg 243 g</b> |

|                                  |                                    |
|----------------------------------|------------------------------------|
| <b>Cognitive Domain: Knowing</b> | <b>Content Domain: Measurement</b> |
|----------------------------------|------------------------------------|

6. What is the total amount of liquid in containers A and B altogether?



a. **427 mL**

b. **447 mL**

c. **457 mL**

d. **467 mL**

**Cognitive Domain: Applying**

**Content Domain: Measurement**

7. From the 865 mL of juice in the jug, Allan and Jack consume 127 mL and 165 mL respectively. How much juice will be left in the jug?



**865 mL**

a. **573 mL**

b. **700 mL**

c. **738 mL**

d. **768 mL**

**Cognitive Domain: Knowing**

**Content Domain: Time and Money**

8. What will be the time an hour after the time shown on the clock?



a. **5:20**

b. **5:30**

c. **6:20**

d. **7:20**

**Cognitive Domain: Applying**

**Content Domain: Time and Money**

9. The train scheduled to arrive at 11:40 a.m. was delayed by an hour and 10 minutes. At what time will the train arrive?

a. **12:30 a.m.**

b. **12:50 a.m.**

c. **12:30 p.m.**

d. **12:50 p.m.**

**Cognitive Domain: Applying**

**Content Domain: Time and Money**

10. Fill in the blank:

Jane went to a summer camp that lasted for three weeks. The summer camp lasted for \_\_\_\_ days.

a. **21**

b. **24**

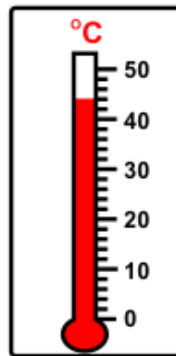
c. **27**

d. **28**

**Cognitive Domain: Knowing**

**Content Domain: Measurement**

11. What is the temperature on the thermometer?



a. **42°C**

b. **44°C**

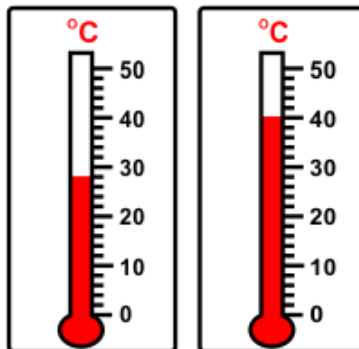
c. **42°F**

d. **44°F**

**Cognitive Domain: Applying**

**Content Domain: Measurement**

12. How much higher is the temperature shown by thermometer B than thermometer A?



a. **8°C**

b. **12°C**

c. **14°C**

d. **16°C**

Cognitive Domain: Applying

Content Domain: Measurement

13. A glass of coffee was prepared at  $89^{\circ}\text{F}$ . Later, some ice cubes were dropped into it which brought the temperature down to  $70^{\circ}\text{F}$ . How much did the ice cubes cool down the coffee?

a.  $9^{\circ}\text{F}$

b.  $17^{\circ}\text{F}$

c.  $19^{\circ}\text{F}$

d.  $21^{\circ}\text{F}$

Cognitive Domain: Knowing

Content Domain: Time and Money

14. Convert the given money into cents.



a.  $150\text{¢}$

b.  $200\text{¢}$

c.  $250\text{¢}$

d.  $300\text{¢}$

Cognitive Domain: Knowing

Content Domain: Time and Money

15. Fill in the blank:

The total money shown is \_\_\_ pennies.



a. 64

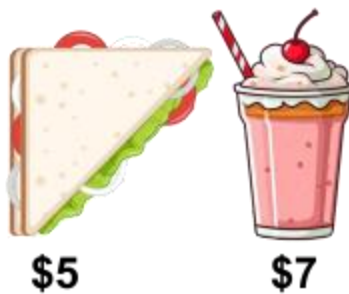
b. 74

c. 114

d. 124

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| <b>Cognitive Domain: Applying</b> | <b>Content Domain: Time and Money</b> |
|-----------------------------------|---------------------------------------|

16. What is the total cost of buying 4 sandwiches and 2 milkshakes?



- |                |                |
|----------------|----------------|
| a. <b>\$12</b> | b. <b>\$14</b> |
| c. <b>\$20</b> | d. <b>\$34</b> |

|                                  |                                 |
|----------------------------------|---------------------------------|
| <b>Cognitive Domain: Knowing</b> | <b>Content Domain: Geometry</b> |
|----------------------------------|---------------------------------|






17. What 3D shape does the given object resemble?



- |                    |                  |
|--------------------|------------------|
| a. <b>cylinder</b> | b. <b>cube</b>   |
| c. <b>cone</b>     | d. <b>cuboid</b> |

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| <b>Cognitive Domain: Applying</b> | <b>Content Domain: Data Handling</b> |
|-----------------------------------|--------------------------------------|

18. The given table shows the number of chocolates eaten by 4 children. How many chocolates did Diana and Maria eat altogether?

|   |  |
|---|--|
| <b>Susan</b>  |   |
| <b>Lisa</b>   |   |
| <b>Diana</b>  |  |
| <b>Maria</b>  |  |
| <b>Each  = 3 candy</b> |  |



a. **18**

b. **21**

c. **31**

d. **39**

**Cognitive Domain: Applying**

**Content Domain: Number**

19. Fill in the blank:

**7, 20, \_\_, 46, 59**

a. **31**

b. **33**

c. **34**

d. **35**

**Cognitive Domain: Applying**

**Content Domain: Number**

20. What will be the missing shape?



### Scholar Section (Each Question is 2 Marks)

**Cognitive Domain: Knowing**

**Content Domain: Number**

21. Which of the following shows the correct ascending order of numbers?

a. **526 > 108 > 624 > 412**    b. **108 < 412 < 526 < 624**

c. **108 > 412 > 526 > 624**    d. **108 < 526 < 412 < 624**

|                            |                                |
|----------------------------|--------------------------------|
| Cognitive Domain: Applying | Content Domain: Life Processes |
|----------------------------|--------------------------------|

22. Identify the 3-digit number based on the given hints.  
 The ones place digit is the greatest single-digit odd number.  
 The sum of the tens and hundreds place digit is 3.

a. **129**

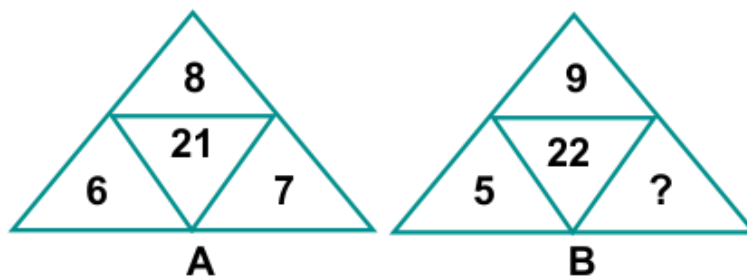
b. **211**

c. **227**

d. **921**

|                            |                        |
|----------------------------|------------------------|
| Cognitive Domain: Applying | Content Domain: Number |
|----------------------------|------------------------|

23. If the same relationship is followed in B as in A, find the missing number.



a. **7**

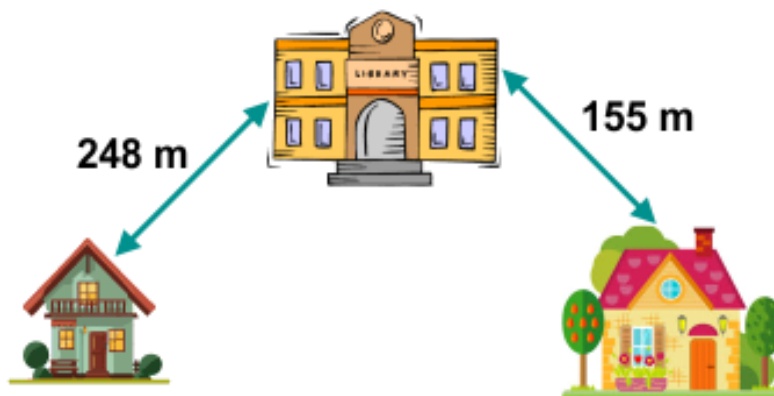
b. **8**

c. **9**

d. **11**

|                           |                             |
|---------------------------|-----------------------------|
| Cognitive Domain: Knowing | Content Domain: Measurement |
|---------------------------|-----------------------------|

24. Bob cycles from his home to the library and then from the library to his friend Peter's home.  
 How much distance did he cycle?



a. **303 m**

b. **393 m**

c. **403 m**

d. **493 m**

**Cognitive Domain: Applying**

**Content Domain: Measurement**

25. What is the weight of the teddy bear?



a. **180 g**

b. **200 g**

c. **220 g**

d. **240 g**

**Cognitive Domain: Applying**

**Content Domain: Time and Money**

26. John played in the park from 5:10 p.m. to 6:45 p.m. For what duration did he play in the park?

a. **1 hour 20 min**

b. **1 hour 30 min**

c. **1 hour 35 min**

d. **1 hour 40 min**

**Cognitive Domain: Applying**

**Content Domain: Measurement**

27. The temperature of a city is  $41^{\circ}\text{F}$  on the coldest day. The temperature on the warmest day of the city is  $32^{\circ}\text{F}$  more than the temperature on the coldest day. Find the temperature on the warmest day.

a.  **$9^{\circ}\text{F}$**

b.  **$63^{\circ}\text{F}$**

c.  **$71^{\circ}\text{F}$**

d.  **$73^{\circ}\text{F}$**

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| <b>Cognitive Domain: Applying</b> | <b>Content Domain: Time and Money</b> |
|-----------------------------------|---------------------------------------|

28. What will be the change received if \$100 is paid at the counter for buying the given items?



- |                |                |
|----------------|----------------|
| a. <b>\$23</b> | b. <b>\$47</b> |
| c. <b>\$53</b> | d. <b>\$57</b> |

|                                  |                                 |
|----------------------------------|---------------------------------|
| <b>Cognitive Domain: Knowing</b> | <b>Content Domain: Geometry</b> |
|----------------------------------|---------------------------------|

29. Fill in the blanks:

There are \_\_\_ horizontal lines and \_\_\_ vertical lines in the given image.



- |                |                |
|----------------|----------------|
| a. <b>2, 2</b> | b. <b>2, 3</b> |
| c. <b>3, 2</b> | d. <b>3, 3</b> |

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| <b>Cognitive Domain: Applying</b> | <b>Content Domain: Data Handling</b> |
|-----------------------------------|--------------------------------------|

30. The given table shows the number of cookies eaten by 4 children.  
How many more cookies did Diana eat than Susan?

|              |             |
|--------------|-------------|
| <b>Susan</b> |             |
| <b>Lisa</b>  |             |
| <b>Diana</b> |             |
| <b>Maria</b> |             |
| <b>Each</b>  | = 3 cookies |

a. 

b. 

c. 

d. 

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## Answer Key

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