



GRADE 2 / WATCH MR DJ SOLVE

MENTAL FACTS WITHIN 20

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE****Find $8+5$. Show a make-ten step.**

- 1 Move 2 from 5 to 8.
- 2 $10+3=13$.
- 3 The total stays the same.

Answer: **13****REMEMBER** use make-ten, doubles and related facts to add and subtract within 20.

Read each step and explain why it is valid. The next pages demonstrate the methods in more detail. Then use the large work areas on the numbered practice pages.



GRADE 2 / WORKED METHODS

MENTAL FACTS WITHIN 20

Read a complete example before trying the matching method.

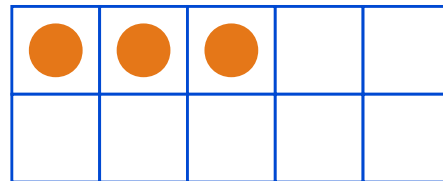
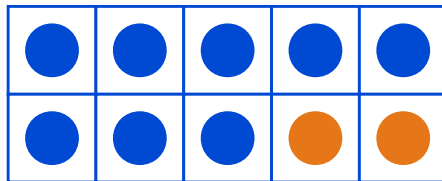


Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Make ten

$8+5=13$

1. 8 needs 2 to make 10.
2. Split 5 into 2 and 3.
3. $10+3=13$.



$$8 + 5 = 13$$

$$10 + 3 = 13$$

**GRADE 2 / WORKED METHODS****MENTAL FACTS WITHIN 20**

Read a complete example before trying the matching method.

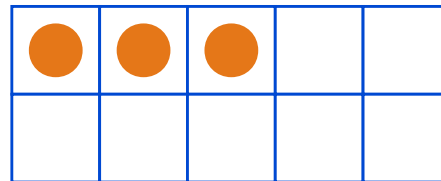
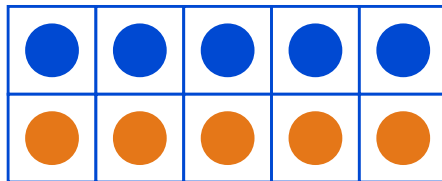


Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Use a related fact

$13-5=8$

1. Think $5+\square=13$.
2. $5+8=13$.
3. The missing part is 8.



$$5 + 8 = 13$$

$$10 + 3 = 13$$

GRADE 2 / MATHEMATICAL WORK TOOL

MENTAL FACTS WITHIN 20

Draw, label and explain.



Draw up to ten counters in each frame. Use one color for each part. Move counters to complete a ten.



Date _____

MENTAL FACTS WITHIN 20

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

1. Find 13–5. Think of an adding fact.

Mild 2. Use a double to find $6+7$.



Date _____

MENTAL FACTS WITHIN 20

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

Medium 3. Find 15–7. Show how to reach 10 first.

My answer / conclusion: _____

Medium 4. Fill $\square$: $8 + \square = 13$. Show counters.

My answer / conclusion: _____



Date _____

MENTAL FACTS WITHIN 20

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

Medium 5. Find $4+8+3$. Choose an easy pair first.

My answer / conclusion: _____



Date _____

MENTAL FACTS WITHIN 20

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

🔥🔥🔥 **Spicy**

6. Digit says $6+7$ is the double of 6. What is missing?

My answer / conclusion: _____



Date _____

MENTAL FACTS WITHIN 20

A cartoon fox character with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

7. Find two ways to solve $8+5$. Explain which you like.

My answer / conclusion: _____



Date _____

MENTAL FACTS WITHIN 20

A cartoon fox mascot with orange fur, large eyes, and a purple collar, holding a yellow pencil.

8. Write two different sums of one-digit numbers equal to 14. Prove them with counters.

My answer / conclusion: _____