

Core Content

Cluster Title: Use place value understanding and properties of operations to add and subtract.

Standard : 5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

MASTERY Patterns of Reasoning:

Conceptual:

Understand place value of ones and tens.

Understand more and less.

Understand that ten more is ten more ones, or 1 more ten.

Understand that adding/subtracting ten does not change the ones place.

Procedural:

Identify the tens and ones place of given number.

Explain why a given number is ten more/less.

Mentally add/subtract ten from a given number.

Representational:

Draw a picture to justify what 10 more/less of a given number is.

Supports for Teachers

Critical Background Knowledge

Conceptual:

- Understand numbers can be composed and decomposed.
- Understand the counting sequence.
- Understand the concept of 1 more/less.
- Understand the concept of place value of ones and tens

Procedural:

- Count to 99.
- Identify numbers and name them.
- Count forward beginning from a given number within a known sequence (instead of having to begin at 1).

Representational:

- Represent a number of objects with a written numeral (0-20)

Academic Vocabulary and Notation

ten, one, more, less, place value

Instructional Strategies Used	Resources Used
<p>Use base 10 blocks or 10 frames to model understanding of 10 more/less.</p> <p>Draw pictures to model 10 more/less.</p> <p>Play dice games to practice the concept.</p> <p>Have students create real world problems using 10 more/less.</p> <p>Review with “I have, Who has?” games.</p> <p>Review using a Hundreds chart.</p> <p>Allow students to explain/prove their thinking during any of these strategies.</p>	<p>“I have, Who has?” Game example.</p> <p>"Who Is" Cards http://www.teachingideas.co.uk/maths/whoiscards.htm</p> <p>Game Idea http://www.primaryresources.co.uk/maths/pdfs/10moreor10lessgame.pdf</p> <p>10 more 10 less Activities http://tenframesystem.com/Ten-Frame_Math_FAQ_10_more_than_10_less_than.pdf</p>
Assessment Tasks Used	
<p>Skill-based Task:</p> <p>Write the number that is 10 more than 52. _____</p> <p>Write the number that is 10 less than 37. _____</p>	<p>Problem Task:</p> <p>Think of something you would like to buy. How many dollars would you need? Record the price. _____</p> <p>The cost of the item changes \$10. What is the new price? _____</p> <p>Explain what happened to your price. _____</p> <p>_____</p>