

Partition Teen Numbers - Informal.

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Differentiate and Assess

Not every student will be ready to investigate this concept at this Level and so we will need to differentiate to ensure every student is learning at their leading edge. Select the Differentiate button on this screen.

Integrate

Every mathematical concept is integrally related to other mathematical concepts. Teaching and learning related concepts simultaneously develops deep relational understanding. Select the Integrate button on this screen.

Intervene

Some students may not yet be ready to investigate this concept at any Level, and so we will need to provide some intervention. Select the Intervention button on this screen.

PARTITIONING TEEN NUMBERS - INFORMAL.

EXPLICIT TEACHING PLAN OVERVIEW PAGE

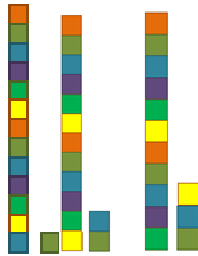
THIS PAGE IS A SUMMARY OF THE EXPLICIT TEACHING PLAN, INCLUDING STRATEGIC QUESTIONS, AND DESCRIBING THE SEQUENCE WHICH WILL OCCUR OVER MULTIPLE LESSONS.

RESOURCES: NUMBER CARDS, CONNECTING BLOCKS, PENCIL, PAPER

WHAT COULD WE DO?

Children:

- partition teen numbers into 2 parts, for example, 13 and 1, 12 and 2, 11 and 3



- partition teen numbers into equal parts, for example 7 and 7



WHAT LANGUAGE COULD WE USE TO EXPLAIN AND ASK QUESTIONS?

Children

- ask one another questions about partitioning teen numbers, for example:
 - ▶ How could we partition this teen number into 2 parts?
 - ▶ Are the parts equal or unequal?
 - ▶ How could we record this partition?
 - ▶ Are these parts unequal?
 - ▶ How else could we partition the tower of 14 blocks into 2 parts?
 - ▶ Could we partition into 11 and 3, 10 and 4, 9 and 5, 8 and 6?
 - ▶ Are these parts equal or unequal?
 - ▶ Could we partition into 7 and 7?
 - ▶ Are these parts equal or unequal?
 - ▶ Can our parts swap places?
 - ▶ Is the 13 and 1 partition, also 1 and 13?

PARTITIONING TEEN NUMBERS - INFORMAL.

EXPLICIT TEACHING PLAN

FULL EXPLICIT TEACHING PLAN, EMBEDDING DEEP RELATIONAL UNDERSTANDING, METALANGUAGE, AND QUESTIONS THAT MAY BE USED OVER MULTIPLE LESSONS.

WHAT COULD WE DO?

Children think about, talk and listen to a friend about, then have the opportunity to share what they already know.

Using connecting cubic centimetres to investigate place value, and using larger connecting blocks to investigate partitioning, allows children to focus their attention on the concept they are investigating.

Children never make a tower of more than 10 using the connecting cubic centimetres, because the concept they are investigating is place value, but may make towers of any amount using larger connecting blocks because the concept they are investigating is partition.

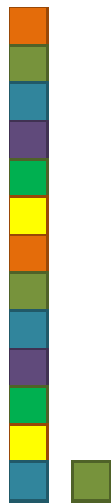


Select a teen number, for example, 14

Display 14 blocks.

Make a tower by joining the 14 blocks, for example,

Partition the tower of 14 into 13 and 1, for example,



WHAT LANGUAGE COULD WE USE TO EXPLAIN AND ASK QUESTIONS?

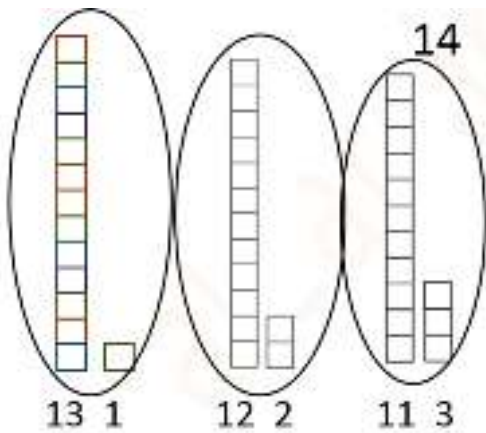
- ▶ Today brings an investigation about partitioning.
 - ▶ What do you know about partitioning?
 - ▶ Talk about partitioning with a friend.
 - ▶ Is anyone ready to share what they are thinking about partitioning?
-
- ▶ We've investigated partitioning and we found that partitioning means break into parts!
 - ▶ Today we're going to investigate partitioning teen numbers.
 - ▶ Let's select 14 blocks.
 - ▶ How could we make a tower using these 14 blocks?
 - ▶ How could we partition the tower of 14 blocks into 2 parts?
 - ▶ Could we partition into (for example) 13 and 1?

Put the tower of 14 back together again, for example,



Partition the tower of 14 into 11 and 3, for example,

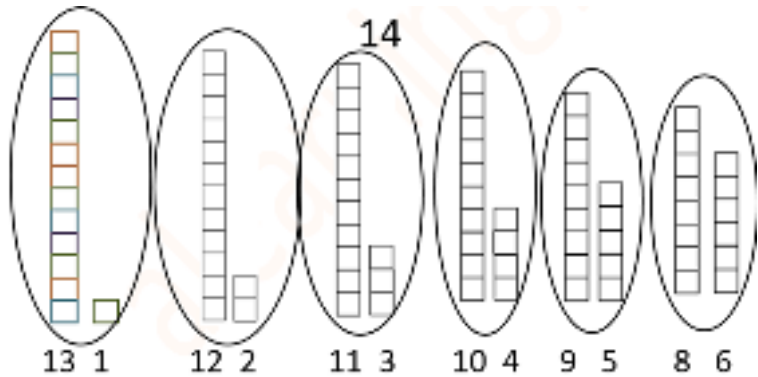
Record the partition, for example,



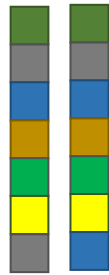
- ▶ Please put the tower of 14 back together again.
- ▶ How else could we partition the tower of 14 blocks into 2 parts?
- ▶ Could we partition into (for example) 11 and 3?

- ▶ How could we record this partition?
- ▶ Are these parts equal or unequal?
- ▶ Are these parts unequal?

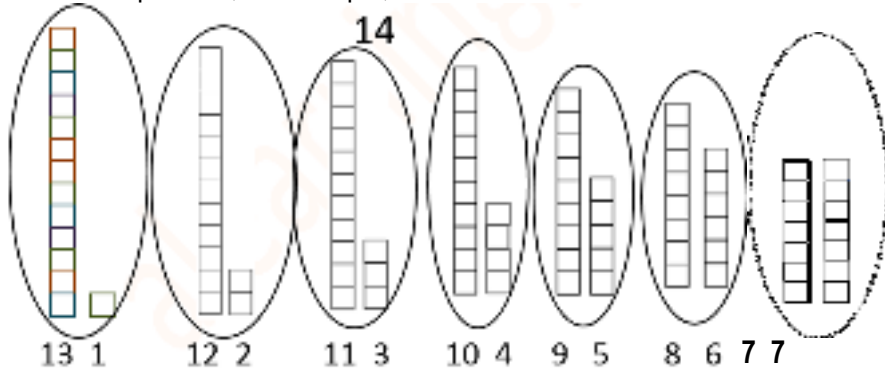
Continue partitioning the 14 blocks, for example,



Partition the tower of 14 into 7 and 7, for example,



Record the partition, for example,



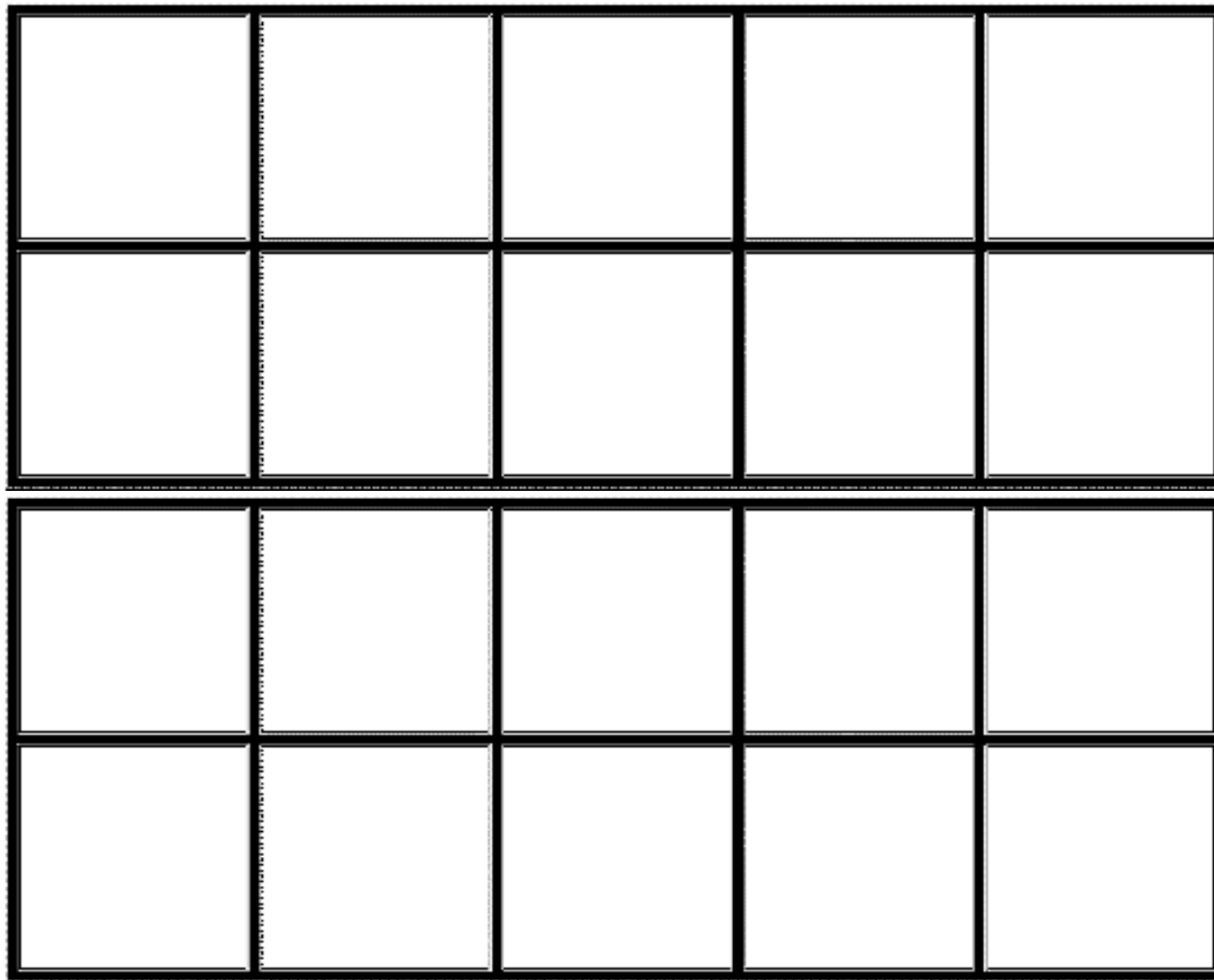
- ▶ Please put the tower of 14 back together again.
- ▶ How else could we partition the tower of 14 blocks into 2 parts?
- ▶ Could we partition into (for example) 10 and 4?
- ▶ Could we partition into (for example) 9 and 5?
- ▶ Could we partition into (for example) 8 and 6?
- ▶ How could we record this partition?
- ▶ Are these parts equal or unequal?
- ▶ Are these parts unequal?

- ▶ How else could we partition the tower of 14?
- ▶ Could we partition into (for example) 7 and 7?

- ▶ How could we record this partition?
- ▶ Are these parts equal or unequal?
- ▶ Are these parts equal?

- ▶ Can the parts swap places?
- ▶ Is the 13 and 1 partition, also 1 and 13?
- ▶ Is the 2 and 12 partition, also 2 and 12?

Empty 10 frame (print, cut out and distribute one 10 frame to each child) [back](#)



Numerals 0 – 10(print, cut out and distribute to each child)

0	1	2	3
4	5	6	7
8	9	10	