

DMT INSTITUTE

Developing Mathematical Thinking Institute (DMTI)



Professional
Development



Curricular
Resources



Assessment

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About the DMTI Targeted Activities

These DMTI Targeted Activities modules are designed to be played or completed with a partner or in small groups. These supplement the Intermediate Math Assessment and DMTI curricular materials.

The activities are intended for teachers or caregivers to play or do with children to build necessary math skills, concepts and math language. Each activity can be completed in or played for 10 to 20 minutes. And if there are additional activities in a module, they are built to be more advanced.

IMA – Grade 3 - 6

Decimal Concepts – I Have, Who Has? Game

Decimal Concepts

What's involved:

- Iterating and partitioning units of one and fractional amounts based on the decimal number system
- Understanding similarities and differences with equivalent amounts using different decimal units
- Comparing decimals
- Understanding the relationship between quantities in the base 10 number system

Why it matters:

- Helps students make sense of numbers smaller than one
- Reinforces measurement concepts
- Helps students make sense of operations with whole numbers and decimals to improve calculation accuracy
- Connects to math, science, technology, and engineering career fields

Decimal Concepts: I Have, Who Has?

Materials

- Scissors
- Templates [Printout]

Decimal Concepts: I Have, Who Has?

Activity 1 – Directions

1. Play with 3-6 players. Print out the **three pages of Game Cards** (see templates) and cut out the cards.
2. Shuffle them and then deal the **Game Cards** out equally to each player. Any extra cards can be held by the dealer or set aside to be removed from the game.
3. Player A starts by randomly grabbing any of their cards and then reading the statement: *“I have _____. Who has _____?”*
4. The player with the answer to the, *“I have _____. Who has _____?”* statement indicates they have the correct number. This is Player B.
5. Player B receives the card from Player A. Player B then reads their card’s statement, *“I have _____. Who has _____?”*
6. The player who received the card wins the card and places it face down in front of them.
7. This process repeats until the cards are all face down. The player with the most cards wins.

Decimal Concepts: I Have, Who Has?

Activity 1 – Example

Player A: I have 2.7. Who has 3 units of one and 4 units of tenths?"

Player B: I have 3.4. Who has 1 unit of one and 6 units of tenths?"

Player C: I have 1.6.....etc.

Decimal Concepts: I Have, Who Has?

Template Information

The following cards follow a sequential order and match from left to right (Templates 1.1, 1.2, and 1.3). The last card on the bottom right of template 1.3 is the match for the first card (top left) on template 1.1.

The cards can be modified and repeated for multiple versions of the game.

Template 1.1: Game Cards

I have 1.3. Who has 1 unit of one and 4 units of tenths?	I have 1.4. Who has 1 unit of one and 7 units of tenths?	I have 1.7. Who has 2 units of one and 3 units of tenths?	I have 2.3. Who has 2 units of one and 9 units of tenths?
I have 2.9. Who has 3 units of one and 2 units of tenths?	I have 3.2. Who has 4 units of one and 6 units of tenths?	I have 4.6. Who has 5 units of one and 2 units of tenths?	I have 5.2. Who has 5 units of one and 9 units of tenths?
I have 5.9. Who has 6 units of one and 8 units of tenths?	I have 6.8. Who has 7 units of one and 4 units of tenths?	I have 7.4. Who has 8 units of one and 5 units of tenths?	I have 8.5. Who has 9 units of one and 1 unit of a tenth?

Template 1.2: Game Cards

<p>I have 9.1. Who has 2 units of one and 14 units of tenths?</p>	<p>I have 3.4. Who has 2 units of one and 17 units of tenths?</p>	<p>I have 3.7. Who has 3 units of one and 15 units of tenths?</p>	<p>I have 4.5. Who has 3 units of one and 19 units of tenths?</p>
<p>I have 4.9. Who has 4 units of one and 13 units of tenths?</p>	<p>I have 5.3. Who has 5 units of one and 16 units of tenths?</p>	<p>I have 6.6. Who has 6 units of one and 12 units of tenths?</p>	<p>I have 7.2. Who has 7 units of one and 19 units of tenths?</p>
<p>I have 8.9. Who has 7 units of one and 18 units of tenths?</p>	<p>I have 8.8. Who has 7 units of one and 14 units of tenths?</p>	<p>I have 8.4. Who has 8 units of one and 15 units of tenths?</p>	<p>I have 9.5. Who has 9 units of one and 11 units of tenths?</p>

Template 1.3: Game Cards

I have 10.1. Who has 2 units of one and 24 units of tenths?	I have 4.4. Who has 2 units of one and 27 units of tenths?	I have 4.7. Who has 3 units of one and 25 units of tenths?	I have 5.5. Who has 3 units of one and 28 units of tenths?
I have 5.8. Who has 4 units of one and 35 units of tenths?	I have 7.5. Who has 3 units of one and 46 units of tenths?	I have 7.6. Who has 6 units of one and 22 units of tenths?	I have 8.2. Who has 2 units of one and 59 units of tenths?
I have 7.9. Who has 5 units of one and 23 units of tenths?	I have 7.3. Who has 6 units of one and 34 units of tenths?	I have 9.4. Who has 8 units of one and 25 units of tenths?	I have 10.5. Who has 1 unit of one and 3 units of tenths?

Decimal Concepts: I Have, Who Has?

Activity 2 – Directions

Follow the same game process as was described for Activity 1.

Activity 2 uses slightly more difficult number combinations (Templates 2.1, 2.2, and 2.3)

Template 2.1: Game Cards

<p>I have 12.3. Who has 2 units of ten and 4 units of tenths?</p>	<p>I have 20.4. Who has 3 units of ten, 2 units of one, and 7 units of tenths?</p>	<p>I have 32.7. Who has 3 units of ten and 3 units of tenths?</p>	<p>I have 30.3. Who has 4 units of ten, 3 units of one, and 9 units of tenths?</p>
<p>I have 43.9. Who has 40 units of one and 2 units of tenths?</p>	<p>I have 40.2. Who has 50 units of one and 6 units of tenths?</p>	<p>I have 50.6. Who has 6 units of ten and 12 units of tenths?</p>	<p>I have 61.2. Who has 4 units of ten, 8 units of one, and 9 units of tenths?</p>
<p>I have 48.9. Who has 7 units of ten and 38 units of tenths?</p>	<p>I have 73.8. Who has 81 units of one and 4 units of tenths?</p>	<p>I have 81.4. Who has 8 units of one and 15 units of tenths?</p>	<p>I have 9.5. Who has 10 units of ten and 1 unit of tenths?</p>

Template 2.2: Game Cards

I have 10.1. Who has 3 units of one and 14 units of tenths?	I have 4.4. Who has 3 units of one and 17 units of tenths?	I have 4.7. Who has 4 units of one and 15 units of tenths?	I have 5.5. Who has 4 units of one and 19 units of tenths?
I have 5.9. Who has 5 units of one and 13 units of tenths?	I have 6.3. Who has 6 units of one and 16 units of tenths?	I have 7.6. Who has 7 units of one and 12 units of tenths?	I have 8.2. Who has 8 units of one and 19 units of tenths?
I have 9.9. Who has 8 units of one and 18 units of tenths?	I have 9.8. Who has 8 units of one and 14 units of tenths?	I have 9.4. Who has 1 unit of one and 5 units of hundredths?	I have 1.05. Who has 1 unit of one and 11 units of hundredths?

Template 2.3: Game Cards

<p>I have 1.11. Who has 3 units of one, 2 units of tenths, and 4 units of hundredths?</p>	<p>I have 3.24. Who has 3 units of one, 1 unit of tenths, and 17 units of hundredths?</p>	<p>I have 3.27 . Who has 4 units of one and 25 units of tenths?</p>	<p>I have 6.5. Who has 4 units of one and 28 units of tenths?</p>
<p>I have 6.8. Who has 5 units of one and 35 units of tenths?</p>	<p>I have 8.5. Who has 4 units of one and 46 units of tenths?</p>	<p>I have 8.6. Who has 7 units of one, 2 units of tenths, and 20 units of hundredths?</p>	<p>I have 7.40. Who has 3 units of one and 59 units of tenths?</p>
<p>I have 8.9. Who has 9 units of one and 23 units of tenths?</p>	<p>I have 11.3. Who has 8 units of one and 34 units of tenths?</p>	<p>I have 11.4. Who has 9 units of one and 25 units of tenths?</p>	<p>I have 11.5. Who has 1 unit of ten, 2 units of one, and 3 units of tenths?</p>



“The Developing Mathematical Thinking Institute (DMTI) is dedicated to enhancing students’ learning of mathematics by supporting educators in the implementation of research-based instructional strategies through high-quality professional development, curricular resources and assessments.”

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