

## Playbook Companion for Students with the Most Significant Cognitive Disabilities

Grade: 7th

Unit: Integers

Grade Level Playbook

### ESSENTIAL ELEMENTS ADDRESSED IN THIS UNIT

[EE.7.NS.3](#) Compare quantities represented as decimals in real world examples to tenths

### LEARNING PROGRESSION

**Grade Below:**

[EE.6.NS.5-8](#) Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero)

**Grade Above:**

[EE.8.EE.1](#) Identify the meaning of an exponent (limited to exponents of 2 and 3)

### STUDENT-FRIENDLY LINKAGE LEVEL LEARNING TARGETS

- Initial Precursor:
  - I can identify when items are in a set.
  - I can identify when items are not in a set.
  - I can identify when items are in a subset.
- Distal Precursor:
  - I can identify tenths.
- Proximal Precursor:
  - I can write a number using decimal to tenths.

### ASSESSMENTS AND EVIDENCE

- Target:
  - I can compare two numbers with decimals.

## KEY ACADEMIC VOCABULARY

- Identify
- Set
- Subset
- Tenths
- Decimals
- Compare
- Whole number

## DOK Questions

- DOK 1:
  - How can you identify a set? Subset? Decimal?
  - What is \_\_\_\_?
  - Can you select the set? Subset? Decimal?
  - What is the area of \_\_\_\_?
  - How would you write \_\_\_\_?
- DOK 2:
  - How would you compare \_\_\_\_?
  - What can you say about \_\_\_\_?
  - What do you notice about \_\_\_\_?
- DOK 3:
  - How do you know \_\_\_\_?
  - How is \_\_\_\_ related to \_\_\_\_?
  - What would happen if \_\_\_\_?
- DOK 4 requires extended thinking such as a synthesis of information or interpretation of data to solve a problem. This could be demonstrated in an experiment or project that takes time to complete and evaluate.

## On-Going Standards

[EE.7.NS.1](#) Add fractions with like denominators (halves, thirds, fourths, and tenths) with sums less than or equal to one

[EE.7.NS.2.a](#) Solve multiplication problems with products to 100

## Intervention Plan

### Intensive (Needs Support)

- Repetition of guided practice
- Prompting hierarchy
- Visual aids

### Strategic (Close)

- Flexible grouping
- Fade prompting
- Fade visual aids

### Good to Go (Ready)

- Move to [E.8.EE.1](#)

**NOTE:** This instructional plan is not limited to the suggestions provided here. The intention is for each teacher to assess his or her students and use the plan to help guide the instructional route based on each student's individualized needs. Instruction must be aligned to grade-level expectations. Identifying resources to support instruction might include looking at content from various grade-bands. It is imperative to be mindful, however, to connect all instruction and resources back to grade-level expectations.

## Instructional Plans

## Common Misconceptions

### Initial Precursor:

- Identify sets of items throughout students day. Count items and assign numerical values whenever possible (two balls, three crackers).
- Using items with subsets, have students conclude that subsets are parts of the whole (8 Fruit Loops could be separated into 3 red and 5 orange). Repeat this activity throughout the day as the opportunity arises.
- Consider introducing a [ten frame](#) with a [song](#). Use the ten frame when counting sets and making subsets. This will help students understand that sets have parts.

### Distal Precursor:

- Identify sets of items throughout students day. Count items and assign numerical values whenever

<p>possible (two balls, three crackers).</p> <ul style="list-style-type: none"> <li>• As a group, review simple fractions (<math>\frac{1}{2}</math>, <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{10}</math>).</li> <li>• Using a <a href="#">ten frame</a> template and sets of ten manipulatives, have students model <math>\frac{1}{10}</math>th (9 blue bears and 1 red bear). Have students state, “<math>\frac{1}{10}</math>th of the bears are red.” <ul style="list-style-type: none"> <li>◦ Repeat the activity in pairs.</li> </ul> </li> <li>• As a large group, have students play “<a href="#">I have.... who has...?</a>” (you would need to make your own cards for this activity) <ul style="list-style-type: none"> <li>◦ Provide students with a ten frame mat and a set of ten manipulatives with the matching “I have <math>\frac{2}{10}</math>ths...” card.</li> <li>◦ Have students place manipulatives on their ten frames.</li> <li>◦ Next, have one student read their card and describe their frame.</li> <li>◦ The student “who has....” goes next.</li> </ul> </li> </ul>	
<p>Proximal Precursor:</p> <ul style="list-style-type: none"> <li>• Sue <a href="#">Decimals</a> song to introduce the lesson.</li> <li>• Have students make a Conversion notebook. Each <a href="#">page</a> would represent a different decimal/fraction with visuals.</li> <li>• As a large group, have students play “<a href="#">I have.... who has...?</a>” (you would need to make your own cards for this activity) <ul style="list-style-type: none"> <li>◦ Hand out decimal cards to each student.</li> <li>◦ Provide students with an “I have...” card.</li> <li>◦ Next, have one student read their card (The student has 0.1 decimal card. They say “I have one tenth. Who has two tenths?”</li> <li>◦ The student with the decimal card 0.2 would respond next.</li> </ul> </li> </ul>	
<p>Target:</p> <ul style="list-style-type: none"> <li>• Introduce comparing decimals by watching a <a href="#">video</a>.</li> <li>• Have students make a tenths <a href="#">decimal number line</a>.</li> <li>• Have students explain how a whole number has smaller parts.</li> <li>• Incorporate using money into lessons to help students better understand tenths (1 dollar = 10 dimes).</li> <li>• Consider having students play <a href="#">math games</a> to practice the skill.</li> </ul>	

★ **ADDITIONAL RESOURCES:**

[Intervention Resources](#)

[National Library of Virtual Manipulatives](#)

[Virtual Manipulatives](#)

**Possible Special Education Supports:**

- Prompting
- Wait time
- Repetition
- Visual aids
- Manipulatives