

Math 4

Subject: Math Unit: Subtracting Decimals to Tenths

Learning Target: Students learn that decimals can be estimated then subtracted using base ten blocks and place value.

Curriculum Outcomes:

N11.01 Predict the differences of decimals using estimation strategies.

N11.02 Solve problems that involve the subtraction of decimals limited to hundredths.

Screencast Support:

Subtracting Decimals Using Base Ten Blocks

https://www.youtube.com/watch?v=vYW5RdPd_bA

Resources/AT Tips:



- iPads Number Basics app

- Math Sense 4 text p. 210, 211

- Decimal place value mats

- Flats and rods

- Pearson **interactive base ten blocks** - use to demonstrate the **subtraction of decimals (nsvs site)**

- **Online game** <http://www.sheppardsoftware.com/math.htm>. - Subtract the decimals

Lesson Procedure

21st Century Skills

I do:

Activate Prior Knowledge

- Review the value of base ten blocks **when modeling decimals.** (flat= 1whole , rod= 1 tenth). Demonstrate using concrete base ten blocks.
- **Review how to estimate** numbers to the nearest whole.
1.8 - is it closer to 1 or 2?
1.4 - is it closer to 1 or 2?

find, validate
remember,
understand
communicate

<p>You do:</p> <ul style="list-style-type: none"> ▪ Together look at estimation strategies on page 210. Then, explore the three strategies for subtracting decimals: using base ten blocks, subtracting from right to left, and using mental math (thinking addition). ▪ Use the Pearson interactive base ten blocks. (nsvs site) (Use base ten blocks and a decimal place value mat- demonstrate how to model estimation and the subtraction of decimals, like $3.4 - 1.3$, $5.2 - 2.6$, $5.75 - 2.53$, etc. 	<p>collaborate, communicate analyze, synthesize</p>
<p>We do:</p> <ul style="list-style-type: none"> ▪ Collaboratively, have students complete questions 1 through 5 on page 211 of the Math Sense 4 text, Subtracting Decimals to tenths. Students can build numbers using base ten blocks to demonstrate subtraction or they can build and subtract numbers using the app, Number Pieces. ▪ Assessment sheet – complete when students are ready. ▪ Play the online game, Subtracting Decimals http://www.sheppardsoftware.com/math.htm. 	<p>collaborate, communicate analyze, synthesize critical thinking evaluate, leverage</p>
<p>We share:</p> <ul style="list-style-type: none"> ▪ Together correct text; have some students use the SmartBoard to model the subtraction of decimals, using a variety of strategies to ‘find the difference’. Continue reviewing and practising. 	<p>collaborate, communicate critical thinking evaluate, leverage create, publish citizenship</p>
<h2 style="text-align: center;">Differentiation</h2>	
<p>Adaptations:</p> <ul style="list-style-type: none"> ▪ Students can use a 100th grid. They colour squares to represent the larger square. They can cross out the smaller decimal they are subtracting. They count the remainder of squares to get the answer. Repeat and practice. ▪ Review screencast as often as needed. 	<p>Enrichment:</p> <ul style="list-style-type: none"> ▪ Present some word problems that contain both addition and subtraction of decimals. Then ask students to create their own addition story problems. They can exchange with peers.
<p>Assessment:</p> <ul style="list-style-type: none"> -Gather the completed assessment sheet. - Record observations as you rotate around the room; noting how the students are doing. Assist as required. 	

Teacher Reflection:

It is important for the students to develop 'strategies' when adding and subtracting whole numbers and decimals. After practicing these strategies, students should be encouraged to use the strategies that work best **for them**. Have on going discussions about strategies to 'keep the thinking going'.

Practise subtracting decimals.

Name

Date

Use the Number Pieces app or Base Ten Blocks to estimate and then subtract.

Subtracting Decimals to Tenths

1. Estimate each difference.

a) $2.8 - 1.1$

b) $7.9 - 3.2$

c) $6.8 - 5.3$

2. Subtract.

a) $9.4 - 3.2$

b) $7.6 - 4.1$

c) $8.5 - 6.6$

d) $13.8 - 7.3$

e) $6.3 - 4.8$

f) $12.7 - 9.9$

3. Subtract.

$$\begin{array}{r} 8.4 \\ - 4.1 \\ \hline \end{array}$$

$$\begin{array}{r} 11.7 \\ - 8.9 \\ \hline \end{array}$$

$$\begin{array}{r} 26.3 \\ - 14.5 \\ \hline \end{array}$$

$$\begin{array}{r} 15.8 \\ - 12.1 \\ \hline \end{array}$$

$$\begin{array}{r} 1.9 \\ - 0.2 \\ \hline \end{array}$$

