|  |  |  |
| --- | --- | --- |
| **Math 4** | | |
| **Subject: Math**  **Unit: Adding Decimals to Tenths** | | |
| **Learning Target:** Students learn that decimals can be estimated and added using base ten blocks and place value. When adding decimals vertically, the decimal points are always aligned. | | |
| **Curriculum Outcomes:**  **N11.01** Predict sums of decimals using estimation strategies.  **N11.02** Solve problems that involve the addition of decimals to hundredths. | | |
| **Screencast Support:**  [Estimating and Adding Hundredths](https://www.youtube.com/watch?v=mtWFovHAdV4)    Game: [Adding tenths and Hundredths](https://www.teachingchannel.org/videos/elementary-math-lesson-plan) | | |
| **Resources/AT Tips:**  - iPads Number Basics app HD:Users:lorna:Desktop:Screen Shot 2015-07-03 at 8.55.14 AM.png  - Math Makes Sense 4 text  -Decimal place value mats  **-** Flats and rods  -100th grids  -Pearson i**nteractive base ten blocks –** use to demonstrate **(nsvs site)**  **-Game** ‘Adding Tenths and Hundredths’ – screencast demo | | |
| **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.   1.6 – is it closer to 1 or 2?  1.2 – is it closer to 1 or 2? | | find, validate  remember, understand  communicate |
| **You do:**   * Together look at estimation strategies on page 206. Then, explore the **three strategies for adding decimal**: use base ten blocks, add left to right, and use a number line. * Demonstrate how to add decimals using **Pearson interactive base ten blocks.** (Use base ten blocks and a decimal place value mat- demonstrate how to model adding decimals, like 3.6 + 1.1 and 1.3 + 3.5, etc.) (**nsvs site**) (see below) * Present the **screencast**, Estimating and Adding Hundredths. * **Discuss** screencast. **Review** regrouping using the SmartBoard **or** Pearson tools. | | collaborate, communicate  analyze, synthesize |
| **We do:**   * **Collaboratively**, have students complete the **activity sheet** below, Estimating and Adding Decimals. They build and add decimals using the **app,** Number Pieces **or** they use the concrete **base ten blocks**. * **Play the game** as seen on the screencast. Choose decimals for them to add **or** have them choose their own numbers to add. | | collaborate, communicate  analyze, synthesize  critical thinking  evaluate, leverage |
| **We share:**   * **Together** correct text and activity sheet; have some students use the SmartBoard to model the addition of decimals. Continue reviewing. | | collaborate, communicate  critical thinking  evaluate, leverage  create, publish  citizenship |
| **Differentiation** | | |
| **Adaptations:**   * Provide a **decimal place value mat** as they add decimals. * Have them continue to work with base ten blocks, representing decimals, independently and with partners. Use concrete blocks **or** the Number Pieces app. | **Enrichment:**   * Present some **word problems** that contain the addition of decimals. Then ask students to create their own addition story problems. | |
| **Assessment:**  -Gather the completed **assessment sheet**.  **-** Record observations as you rotate around the room; noting how the students are doing. Assist as required. | | |
| **Teacher Reflection:**  Pay attention to make sure studentsare not adding the tens with tenths incorrectly.  – Ex: 0.9 +0.4=0.13. Review that 0.13 is 13 hundredths, **or** 1 tenth and 3 hundredths.  Practice adding decimals. | | |

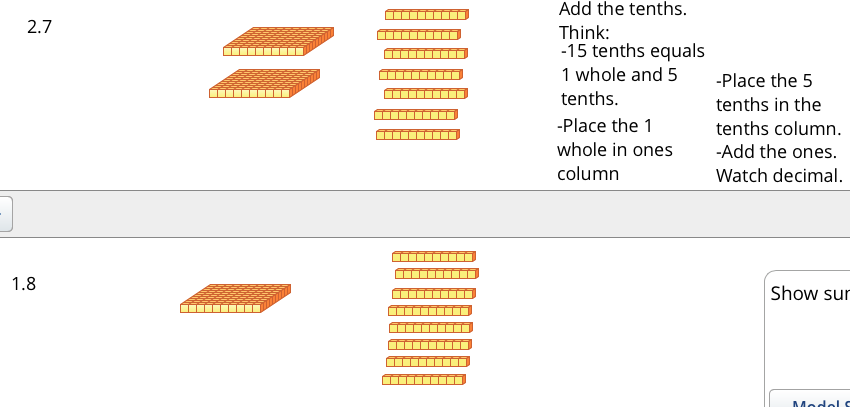
Name Date

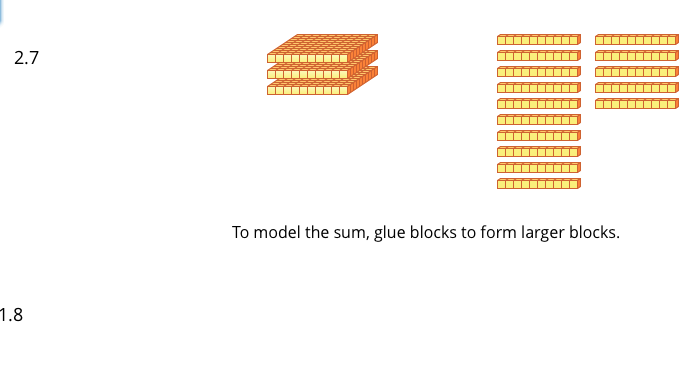
Use the Number Pieces app or Base Ten Blocks to Estimate and then Add.

|  |
| --- |
| **Adding Decimals to Tenths**  1. Estimate each sum.  a) 3.1 + 4.2 b) 1.4 + 0.9 c) 6.2 + 8.1 d) 3.4 + 6.6  2. Add. Use Base Ten Blocks to help you.  a) 6.1 + 4.3 b) 1.4 + 5.3 c) 5.8 + 2.3  d) 1.8 + 0.9 e) 2.2 + 9.4 f) 4.8 + 4.8 |

Master 1.20

Pearson Tools can be used to demonstrate regrouping.





Hundredths Grids

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |