

# Understanding by Design Template

Teacher Prof. Ruiz Grade Kindergarten  
 Date \_\_\_\_\_ Subject Math

## Stage 1- Desired Results

- Established Goals: K.OA.4: At the end of the lesson students will be able to:**
- Find the number that makes 10 when added to a given number, by using objects such as unit bars and connect cubes
  - Record the answer by building it, saying it, and writing it
  - Play “Fill in the Space” with a partner

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| <p><b>Understandings:</b><br/>         Students will understand that....</p> <ul style="list-style-type: none"> <li>• There must be two parts to make a whole, whole = 10</li> <li>• By putting unit bars or connect cubes together, addition is being used to make 10</li> </ul>                   | <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How many ways can the student make 10?</li> <li>• Can the student write an addition number sentence for each way that makes 10?</li> </ul>                      |
| <p>Student will know....</p> <ul style="list-style-type: none"> <li>• How to count to 10 without assistance</li> <li>• The whole is represented by 10, and they are responsible for finding ways to get the whole. A ten bar will be displayed to show what a whole 10 should look like.</li> </ul> | <p>Student will be able to...</p> <ul style="list-style-type: none"> <li>• Use various manipulatives to assist them in finding different combinations to make 10</li> <li>• Use cooperative learning to play “Fill in the Space”</li> </ul> |

## Stage 2- Assessment Evidence

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| <p><b>Performance Tasks:</b> Using the “family” method, students will find different ways to make 10. They will build it, say it, and write it.</p>                          | <p><b>Other Evidence:</b> “Fill in the Space” activity will be used as a formative assessment. The teacher will observe the partner work to ensure there is understanding.</p> |
| <p><b>Self-Assessments:</b> The class will build 10, as a whole, and then work on individual examples at their seats, while the teacher observes and assist when needed.</p> | <p><b>Other Evidence, summarized:</b> Correct use of manipulatives and vocabulary will be evidence of understanding.</p>   |

## Stage 3 Learning Plan

### Learning Activities:

#### *Introduction*

- Students will meet the teacher on the rug, by the smart board.
- On the smart board, the teacher will display an interactive ten block
- The teacher will explain that the 10 block is made up of two parts, and there are different ways to make the whole of 10.
- The teacher will model the first example by showing a 5-bar placed over the 10 bar and explain that we need 5 more to complete the whole of 10.
- The teacher will then build it, by adding 5, say it “5 plus 5 equals 10”, and write it,  $5+5=10$ .
- The teacher will then display a 6-bar placed over the 10 bar and repeat the first model. The teacher will ask the children how much is needed to complete the whole of 10. The teacher will then ask volunteers to answer “saying it”, and “writing it”.
- After one more example as a whole class, the teacher will send the students back to their seats to practice individually.

#### *Individual Practice*

- Each student will have their own set of connect cubes at their seats.
- The teacher will instruct them to make 10 using an 8 bar, 9 bar, 7 bar, and 6 bar, following the same routine from the introduction.

#### *Partner Practice*

- The teacher will pair up the students, differentiating abilities, to complete the *Fill in the Space* activity:
- One student will make a part, Ex. 6 bar, and the other student is responsible for filling in the other part to make 10. Each part must be a different color to help them visualize how many should be added to make 10. Example: Begin with a ten bar; then choose a seven bar and snap it on top of the ten bar. Have the student find the piece that makes ten—in this case, the three bars. Have the student write down  $7 + 3 = 10$ . Then let the student be the teacher and chose a different piece, having their partner find the missing unit bar and write it down.