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| **Prior to this lesson:** Students will have experiences with pairing groups of objects as odd or even numbers and recognizing why a number is odd or even. | | |
| STANDARDS | 2.OA.3  Determine whether a group of objects (up to 20) has an odd or even number of members; Write an equation to express an even number as a sum of two equal addends | |
| **Lesson Structure** | **High Yield Strategies** | **Lesson Plan** |
| **Access Prior Knowledge** | (6) Nonlinguistic Representations  (7) Cooperative Learning  (10) Cues, Questions and Advance Organizers | Image of 5 socks on clothesline  Q: What do you notice about the socks?  socks.jpgTurn and Talk to partner Stem: “I noticed \_\_\_\_\_\_.”  Quick share about what they noticed |
| **Goal** | (8) Setting Objective and Providing Feedback  (4) Reinforcing effort and Providing Recognition | I can discover rules about odd and even numbers. |
| **New Information** | (11) Teaching Specific Types of Knowledge | Teach students how to play the game – Played in pairs.  Each pair has a collection of 15 objects.  In turn, each player takes 1, 2, or 3 objects from the collection until no more objects are left.  The winner is the one who has an odd number of objects.  Model game with a student a couple of times.  Q: Do you think you can figure out how to win? |
| **Application** | **Declarative**  (3)Generating and Testing Hypotheses  (10) Cues, Questions and Advance Organizers | Students play the game several times. Discuss as they play what they are noticing about the numbers.  Discuss their ideas about how to win. “What are you noticing about the numbers?”  Test their ideas/predictions – play the game again with new partners.  Q: What did you find in your investigation? Were your predictions correct?  In notebooks - Reflect: What did you learn about odd and even numbers? |
| **Goal** | (8) Setting Objective and Providing Feedback  (4) Reinforcing effort and Providing Recognition | I can discover rules about odd and even numbers. |

2nd Grade **Odd and Even Investigations – Day 1**

Math

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| **Prior to this lesson:** Students will have experiences with pairing groups of objects as odd or even numbers and recognizing why a number is odd or even. They will have explored some “rules” about odd and even numbers from day 1 of this investigation. | | |
| STANDARDS | 2.OA.3  Determine whether a group of objects (up to 20) has an odd or even number of members; Write an equation to express an even number as a sum of two equal addends | |
| **Lesson Structure** | **High Yield Strategies** | **Lesson Plan** |
| **Goal** | (8) Setting Objective and Providing Feedback  (4) Reinforcing effort and Providing Recognition | I can discover rules about odd and even numbers. |
| **Access Prior Knowledge** | (6) Nonlinguistic Representations  (7) Cooperative Learning  (10) Cues, Questions and Advance Organizers | Notebooks – read over your reflections from yesterday.  Share your reflection with a partner. |
| **Application** | **Declarative**  (3)Generating and Testing Hypotheses  (10) Cues, Questions and Advance Organizers | Let’s investigate these ideas further…  Conduct the Investigation:  Students work individually or in pairs to carry out the following investigation. Students keep track of their work in their notebooks, writing the equations.  • Pick any two odd numbers. Add them.  • What did you notice? Try some more.  • Pick any two even numbers. Add them.  • What did you notice? Try some more.  • What happens with one odd number and one even number?  • Talk to another student about what you noticed. |
| **New Information** | (3) Summarizing and Note Taking | Discuss student reflections on what they noticed about numbers.  Q: What did you discover about odd and even numbers?  Create an anchor chart as student take notes in their notebooks with the “rules” they generate about odd and even numbers. |
| **Goal** | (8) Setting Objective and Providing Feedback  (4) Reinforcing effort and Providing Recognition | Reflection (line of learning) in your notebook, choose one of the rules generated today and write a new equation to illustrate that rule.  I can discover rules about odd and even numbers. |

2nd Grade **Odd and Even Investigations – Day 2**

Math