INTERNATIONAL STEM OLYMPIAD

1. **Number Sense:**
   - Addition and subtraction within 100.
   - Skip counting (e.g., counting by 2s, 5s, 10s).
   - Comparing and ordering numbers.
   - Basic understanding of place value.

   Phet Links:
   Arithmetic
   Number Play
   Number compare
   Make a Ten

2. **Basic Operations:**
   - Multiplication and division (for grade 3 students).
   - Solving simple word problems involving addition, subtraction, and multiplication.

   Phet Links:
   Area Model Multiplication
   Expression Exchange

3. **Measurement:**
   - Length: Comparing and measuring objects using non-standard units (e.g., paper clips, cubes) and standard units (e.g., centimeters, meters).
   - Time: Reading and telling time on analog and digital clocks (hours and half-hours).

   Phet Links:
   Area Builder

   LabXchange Links:
   Time, Speed & Distance
   Basic Water Facts

4. **Geometry:**
   - 2D Shapes: Identifying and describing common shapes (e.g., squares, rectangles, triangles, circles).
   - 3D Shapes: Identifying and describing common solids (e.g., cubes, spheres, cylinders).

5. **Data and Graphs:**
   - Reading and interpreting simple pictographs and bar graphs.

   Phet Links:
   Equality Explorer: Basics

   LabXchange Links:
   Introduction to Statistics
   Data Visualization

6. **Patterns and Sequences:**
   - Recognizing and extending number patterns.

   Phet Links:
   Number Play

7. **Fractions:**
   - Introduction to fractions as parts of a whole (e.g., halves and quarters) for grade 3 students.

   Phet Links:
   Fractions: Intro
   Build a Fraction
   Fraction Matcher