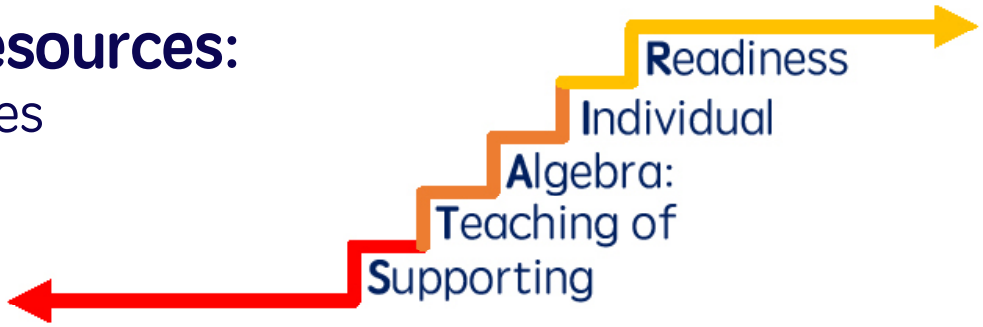
Mathematics Resources:
Virtual Manipulatives



Using Virtual Manipulatives

Advantages
- Provide flexible options for learning
- Increase student independence
- Can be used for all ages (Satsangi & Miller, 2017)
- Used as an alternative to concrete manipulatives
- Can be motivational because of student interest in technology

Considerations
- Consider which tools are appropriate for your students
- It is a tool, not a curriculum. Teachers must know how to integrate thier usage with the curriculum and train students how to use them

Bouck & Flanagan, 2010; Satsangi & Miller, 2017;

Virtual Manipulative Resources

Toy Theather: Educational Games for Kids

https://toytheater.com/category/math-games/

Number Sense
- Bear counters
- Color counters
- Shape counters
- Number lines
- Abacus
- Dice
- Base Ten Blocks
- Hundreds Chart
- Five frames

Fraction & Decimals
- Fraction Strips
- Decimal Strips
- Percentage Strips
- Fraction Circles
- Geoboard

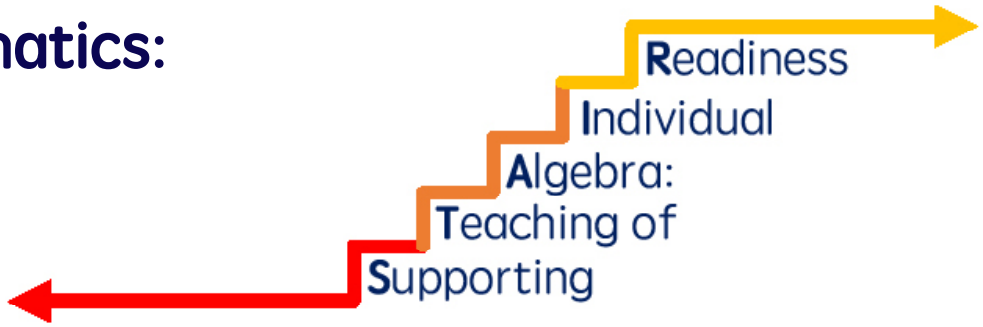
Place Value
- Base Ten Blocks
- Hundreds Mat
- Place Value Chart
- Place Value Cards
- Dice
- Place Value Disks

Geometry
- Pattern Blocks
- Shapes
- Area Perimeter Explorer
- Cube Builder
- Geoboard

Time & Money
- Interactive Clock
- Stopwatch
- Timer
- Money Strips
- US Play Money

Data & Probability
- Graph Square
- Graph Color
- Marble Jar

Ideas in Mathematics:
Inequalities



Didax Educational Resources

https://www.didax.com/

Number Sense
- Two-color Counters
- Ten Frame
- Rekenrek
- Unifix Cubes

Fraction & Decimals
- Geoboard
- Pattern Blocks
- Two-color Counters
- Place Value Disks

Place Value
- Base Ten Blocks
- Dice
- Place Value Disks

Integers & Algebra
- Number Line
- Balance Scale
- Two-color Counters
- Algebra Tiles

Data & Probability
- Spinner

The Math Learning Center

https://www.mathlearningcenter.org/home-learning

Place Value
- Base Ten Blocks

Fraction & Decimals
- Fraction Strips
- Geoboard

Geometry
- Pattern Blocks

Geoboard

Integers & Algebra
- Number Line

Time & Money
- Clock
- Money Mats

Mathingon

https://mathigon.org/

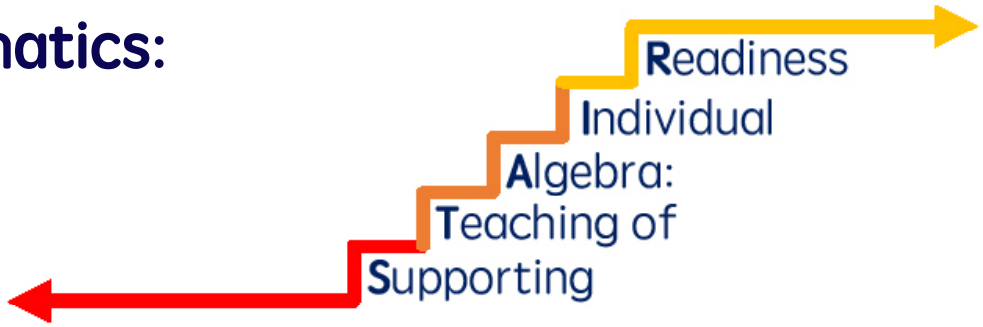
Geometry
- Polygons
- Pentominoes

Tangrams

Fraction & Decimals
- Fraction Strips

Integers & Algebra
- Algebra Tiles

Ideas in Mathematics:
Inequalities



Math Playground

https://www.mathplayground.com/

Geometry
- Protractor

Fraction & Decimals
- Cuisenaire Rods

ABCYA

https://www.abcya.com/games/interactive_100_number_chart

Place Value
- Hundreds Chart

Cool Math 4 Kids

https://www.coolmath4kids.com/manipulatives/number-line

Geometry
- Pattern Blocks
Geoboard

Integers & Algebra
- Number Line

GeoGebra

https://www.geogebra.org/geometry

Geometry
- Lines and angles

NCTM

https://www.nctm.org/Classroom-Resources/Illuminations/Interactives

Geometry
- Geometric Solids

Math is Fun

https://www.mathsisfun.com/time-clocks-analog-digital.html

Time & Money
- Clock

NCES

https://nces.ed.gov/nceskids/createAgraph/default.aspx?ID=0e1b500c7c524de8a7f614ce66e65db0

Data & Probability
- Graph Maker