



Connections with TEKS

Crystal Caves

K.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

K.2 — Number & Operations

- | | |
|--------|--|
| K.2(A) | Count forward and backward to at least 20. |
| K.2(C) | Count a set of objects up to at least 20 with one-to-one correspondence. |
| K.2(D) | Compare sets of objects using comparative language (more, fewer, same). |

K.4 — Number Relationships

- | | |
|--------|---|
| K.4(B) | Generate a number that is one more or one less than a given number. |
|--------|---|

K.8 — Data Analysis

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|--------|--|
| K.8(A) | Sort objects into categories. |
| K.8(B) | Count the number of objects in each category. |
| K.8(C) | Compare sorted categories using informal language. |

1.1 Mathematical Process Standards

- Use problem-solving strategies
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- Justify their thinking
- Apply mathematics to real-world situations

1.2 — Number & Operations

- | | |
|--------|---|
| 1.2(B) | Count forward and backward from any number up to 120. |
| 1.2(E) | Generate a number that is one more or one less than a given number. |

1.8 — Data Analysis

- | | |
|--------|--|
| 1.8(A) | Sort numbers into categories. |
| 1.8(B) | Use tally marks, charts, and graphs to represent data. |
| 1.8(C) | Interpret data to answer questions. |

2.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
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2.10 — Data Analysis**2.10(A)** Sort data into categories.**2.10(B)** Use charts, tables, and graphs to represent data.**2.10(C)** Interpret data to solve problems.**3.1 Mathematical Process Standards**

- Use problem-solving strategies
- Communicate mathematical ideas
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3.7 — Data Analysis**3.7(A)** Represent data using frequency tables, dot plots, pictographs, and bar graphs.**3.7(B)** Interpret data to solve one-step and two-step problems.**3.7(C)** Generate questions and data for investigations.**4.1 Mathematical Process Standards**

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
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4.9 — Data Analysis**4.9(A)** Collect, organize, and display data.**4.9(B)** Analyze data to draw conclusions.**5.1 Mathematical Process Standards**

- Use problem-solving strategies
- Communicate mathematical ideas
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5.9 — Data Analysis**5.9(B)** Interpret data to solve one-step and multi-step problems.**5.9(C)** Describe trends and patterns in data.

Lake Logica

K.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

K.2 — Number & Operations

K.2(A)	Count forward and backward to at least 20.
K.2(B)	Read, write, and represent numbers 0-20.
K.2(C)	Count a set of objects up to at least 20 with one-to-one correspondence.
K.2(D)	Compare sets of objects using comparative language (more, fewer, same).
K.2(F)	Model addition and subtraction with objects, words, and pictures.
K.2(G)	Solve addition and subtraction problems within 10 using concrete models.

K.3 — Algebraic Reasoning

K.3(C)	Use objects and pictures to model joining and separating situations.
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K.4 — Number Relationships

K.4(B)	Generate a number that is one more or one less than a given number.
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1.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

1.2 — Number & Operations

1.2(B)	Count forward and backward from any number up to 120.
1.2(C)	Read and write numbers to 120.
1.2(D)	Represent numbers using objectives, pictures, and expanded form.
1.2(E)	Generate a number that is one more or one less than a given number.
1.2(F)	Compare and order whole numbers using place value.
1.2(G)	Use number lines and models to represent whole numbers.
1.2(H)	Use objects and pictures to model joining (addition) and separating (subtraction).
1.2(I)	Solve addition and subtraction problems within 20.

1.5 — Addition & Subtraction Strategies

1.5(A)	Use strategies (counting on, making ten, doubles) to solve addition problems.
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2.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

2.2 — Number & Operations

2.2(D)	Represent numbers on number lines and in various forms.
2.2(F)	Use mental math strategies to add and subtract numbers.
2.2(G)	Solve addition and subtraction problems within 1,000 using models and algorithms.

2.2(I)	Recall basic addition and subtraction facts with automaticity.
3.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
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• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
4.2 — Number & Operations	
4.2(E)	Multiply up to four-digit numbers by one-digit numbers using strategies and algorithms.
4.2(G)	Divide up to four-digit numbers by one-digit numbers using strategies and models.
4.3 — Algebraic Reasoning	
4.3(B)	Represent and solve multiplication and division problems, including multi-step situations.
4.3(C)	Determine the unknown number in multiplication and division equations.
5.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
5.3 — Algebraic Reasoning	
5.3(B)	Determine the unknown number in equations involving all four operations.

Patchwork Prairie

K.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

K.2 — Number & Operations

K.2(A)	Count forward and backward to at least 20.
K.2(C)	Count a set of objects up to at least 20 with one-to-one correspondence.
K.2(D)	Compare sets of objects using comparative language (more, fewer, same).
K.2(E)	Compose and decompose numbers up to 10.

1.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

1.2 — Number & Operations

1.2(B)	Count forward and backward from any number up to 120.
1.2(D)	Represent numbers using objects, pictures, and expanded form.

2.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

2.5 — Fractions

2.5(A)	Partition objects and shapes into equal parts.
2.5(B)	Name and represent halves, fourths, and eighths.
2.5(C)	Use models to show fractional parts of a whole.

2.7 — Geometry & Measurement

2.7(C)	Partition shapes into equal shares and describe the shares.
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3.1 Mathematical Process Standards

- Use problem-solving strategies
- Communicate mathematical ideas
- Use tools and models
- Justify their thinking
- Apply mathematics to real-world situations

3.4 — Fractions

3.4(A)	Represent fractions using area models, number lines, and sets.
3.4(B)	Explain that a fraction represents a part of a whole or a set.
3.4(C)	Compare fractions with the same numerator or denominator.
3.4(D)	Compose and decompose fractions into sums of unit fractions.
3.4(E)	Represent equivalent fractions using models.

3.4(F)	Solve real-world problems involving fractions.
4.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
4.4 — Fractions	
4.4(A)	Represent fractions as sums of unit fractions.
4.4(B)	Compare fractions with different numerators and denominators using models.
4.4(C)	Generate equivalent fractions using models and number lines.
4.4(E)	Solve real-world problems involving fractions.
5.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	

K.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
K.2 — Number & Operations	
K.2(B)	Read, write, and represent numbers 0-20.
K.2(C)	Count a set of objects up to at least 20 with one-to-one correspondence.
K.2(D)	Compare sets of objects using comparative language (more, fewer, same).
K.2(E)	Compose and decompose numbers up to 10.
K.2(F)	Model addition and subtraction with objects, words, and pictures.
K.2(G)	Solve addition and subtraction problems within 10 using concrete models.
1.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
1.2 — Number & Operations	
1.2(A)	Use concrete and pictorial models to compose and decompose numbers up to 120.
1.2(B)	Count forward and backward from any number up to 120.
1.2(C)	Read and write numbers to 120.
1.2(D)	Represent numbers using objects, pictures, and expanded form.
1.2(G)	Use number lines and models to represent whole numbers.
1.2(H)	Use objects and pictures to model joining (addition) and separating (subtraction).
1.2(I)	Solve addition and subtraction problems within 20.
1.2(J)	Apply properties of operations to solve addition and subtraction problems.
1.3 — Algebraic Reasoning	
1.3(C)	Determine the unknown number in addition and subtraction equations.
1.5 — Addition & Subtraction Strategies	
1.5(A)	Use strategies (counting on, making ten, doubles) to solve addition problems.
1.5(B)	Use strategies to solve subtraction problems.
1.5(C)	Explain strategies used to solve addition and subtraction problems.
1.6 — Geometry & Measurement	
1.6(D)	Compare and order objects by length.
2.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
2.2 — Number & Operations	
2.2(F)	Use mental math strategies to add and subtract numbers.
2.2(G)	Solve addition and subtraction problems within 1,000 using models and algorithms.
2.2(H)	Explain strategies used to solve addition and subtraction problems.

2.2(I)	Recall basic addition and subtraction facts with automaticity.
2.3 — Algebraic Reasoning	
2.3(A)	Model and solve one-step and multi-step addition and subtraction problems.
2.3(C)	Determine the unknown number in addition and subtraction equations.
2.7 — Geometry & Measurement	
2.7(E)	Compare lengths using standard units.
3.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
3.2 — Number & Operations	
3.2(E)	Solve addition and subtraction problems within 1,000 using strategies and algorithms.
3.2(F)	Explain strategies used to solve addition and subtraction problems.
3.6 — Geometry & Measurement	
3.6(F)	Measure length using standard units (inches, feet, centimeters).
4.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
4.4 — Fractions	
4.4(A)	Represent fractions as sums of unit fractions.
4.4(B)	Compare fractions with different numerators and denominators using models.
4.4(C)	Generate equivalent fractions using models and number lines.
4.4(E)	Solve real-world problems involving fractions.
5.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
5.4 — Fractions	
5.4(A)	Add and subtract fractions with unlike denominators using models and algorithms.
5.4(D)	Divide unit fractions by whole numbers and whole numbers by unit fractions using models.

The Secret Stones

K.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
K.2 — Number & Operations	
K.2(A)	Count forward and backward to at least 20.
K.2(C)	Count a set of objects up to at least 20 with one-to-one correspondence.
K.2(D)	Compare sets of objects using comparative language (more, fewer, same).
K.6 — Geometry & Measurement	
K.6(A)	Identify two-dimensional shapes (circle, triangle, square, rectangle).
K.6(B)	Identify three-dimensional solids (sphere, cube, cylinder, cone).
K.6(C)	Describe shapes using attributes (sides, corners, faces).
K.6(F)	Use positional words (above, below, beside, behind, next to).
1.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
1.2 — Number & Operations	
1.2(B)	Count forward and backward from any number up to 120.
1.6 — Geometry & Measurement	
1.6(A)	Classify and sort two-dimensional shapes.
1.6(C)	Identify attributes of shapes (sides, vertices).
2.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
2.2 — Number & Operations	
2.2(F)	Use mental math strategies to add and subtract numbers.
2.2(G)	Solve addition and subtraction problems within 1,000 using models and algorithms.
2.2(H)	Explain strategies used to solve addition and subtraction problems.
2.2(I)	Recall basic addition and subtraction facts with automaticity.
2.4 — Foundations of Multiplication & Division	
2.4(A)	Use repeated addition to model multiplication.
2.4(B)	Use equal groups to represent multiplication situations.
2.5 — Fractions	
2.5(B)	Name and represent halves, fourths, and eighths.
2.5(C)	Use models to show fractional parts of a whole.
2.7 — Geometry & Measurement	
2.7(A)	Identify and describe two-dimensional shapes and three-dimensional solids.
2.7(B)	Classify shapes based on attributes.
2.7(D)	Measure length using standard units (inches, feet, centimeters).

2.7(E)	Compare lengths using standard units.
2.8 — Area & Perimeter Foundations	
2.8(A)	Use square units to measure area.
2.8(B)	Describe area as covering a region.
2.8(C)	Use models to explore perimeter.
3.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
3.2 — Number & Operations	
3.2(G)	Recall multiplication facts up to 10 x 10 with automaticity.
3.2(H)	Use arrays, area models, equal groups, and number lines to represent multiplication.
3.4 — Fractions	
3.4(A)	Represent fractions using area models, number lines, and sets.
3.4(B)	Explain that a fraction represents a part of a whole or a set.
3.6 — Geometry & Measurement	
3.6(A)	Classify and sort two-dimensional shapes based on attributes.
3.6(B)	Describe attributes of polygons (sides, angles).
3.6(C)	Determine the perimeter of a polygon.
3.6(E)	Find area of rectangles using square units.
3.6(F)	Measure length using standard units (inches, feet, centimeters).
4.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
4.5 — Geometry & Measurement	
4.5(A)	Identify and classify two-dimensional shapes based on attributes (parallel/perpendicular lines, angle types).
4.5(B)	Understand and identify lines, rays, segments, and angles.
4.5(E)	Determine perimeter and area of rectangles and composite figures.
5.1 Mathematical Process Standards	
• Use problem-solving strategies • Communicate mathematical ideas • Use tools and models • Justify their thinking • Apply mathematics to real-world situations	
5.6 — Geometry & Measurement	
5.6(A)	Classify two-dimensional figures based on attributes (parallel/perpendicular lines, angle types).
5.6(B)	Understand and describe properties of triangles (acute, obtuse, right).
5.6(D)	Represent and solve problems involving perimeter and area.

