

Japan District Parent Resources

Our District

Japan Schools District's top priority for its students is College and Career Readiness. This publication contains information and resources for parents about this important program focused on student success"



This Newsletter focuses on the topics and types of mathematics your student will be working with in DoDEA's current Math Units.

Kindergarten Unit 5

In Unit 5, kindergarten students will explore non-standard measurement concepts using comparative and descriptive vocabulary. Through conversation, students learn to identify and distinguish different measurable attributes. Students continue to develop the concept of classifying and counting objects — now in the context of classifying two- and three- dimensional shapes. The following concepts will be covered in this unit:

- Measurement
- Math vocabulary
- Classifying figures

Video Links

[Non-Standard Measurement](#)

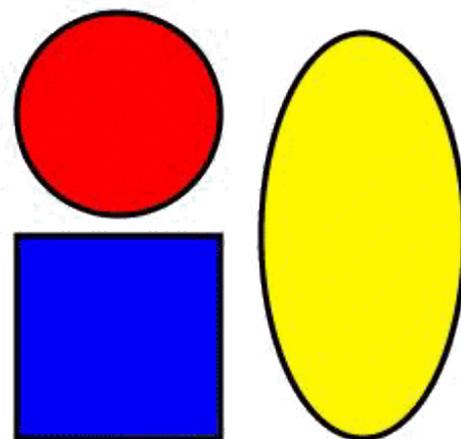
[Classifying & Counting Objects](#)

[Measurement Concepts](#)

Parent Tips

Ask your child questions that require comparing length, weight, or capacity. For example, ask, "Which container is taller, which one will hold the most cereal?"

Ask your child questions that require identifying objects. "Can you find a circle, can you find a sphere?"



First Grade Unit 5

In Unit 5, first grade students will develop appropriate strategies to reason about and solve addition and subtraction problems. In particular, this unit introduces “compare” problems. Because compare problems are relatively difficult for students to master, this unit should provide students time to grapple with the misleading language and difficult contexts involved in these problem types. Students will extend their understanding of telling and writing time to include situations that deal with telling time to the half hour. The following concepts will be covered in this unit:

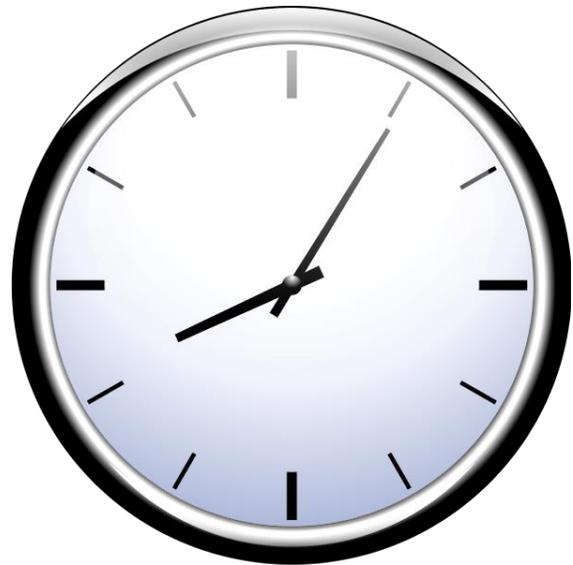
- Addition
- Subtraction
- Comparing
- Telling and writing time

Video Links

[Subtraction: Unknown Addend](#)

[Understanding Equal Sign](#)

[Telling Time](#)



Parent Tips

Make up and discuss short story problems that involve simple addition and subtraction. For example, ask, “If we had 16 cookies and dad ate 7, how many would be left over?”

Ask your child the time at the hour and half hour; ask them to explain how they know the answer, or how they could figure it out if they aren’t sure.

Second Grade Unit 5

In Unit 5, second grade students will represent and interpret data to support the development of addition and subtraction using authentic contexts. Representing data using line plots, picture graphs, and bar graphs is new to this grade level. These tools support students' understanding of measurement and comparison problems. Students name and describe defining attributes of two-dimensional shapes by examining their sides and angles. Students also extend their work from first grade of partitioning geometric figures into halves and fourths to now include thirds. Students use this experience to reason about partitions' equal area and part-whole relationships. The following concepts will be covered in this unit:

- Addition
- Subtraction
- Representing data
- Two-dimensional shape attributes
- Fractions

Video Links

[Addition & Subtraction](#)

[Measurement Data](#)

[Fractions](#)



Parent Tips

Use household items (food, paper towels, etc.) and have your child practice dividing them into halves, thirds, and fourths (emphasizing equal-sized pieces).

Once students have learned a few ways of representing data, find something around the house you can make a line or bar graph about, e.g., types of stuffed animals, colors of LEGO pieces, etc.

Third Grade Unit 5

In Unit 5, third grade students will develop a solid understanding of the connection between multiplication and division. Students recognize that multiplication strategies can be used to make sense of and solve division problems. This unit provides students a solid foundation in solving problems with equal groups and arrays, which is necessary to support future success with measurement problems. Students will build their conceptual understanding of decomposing multiplication problems through the use of the distributive property and the concept of area. Students are not required to use the properties explicitly, but are encouraged to discuss this concept and use area diagrams to support their reasoning. The following concepts will be covered in this unit:

- Multiplication
- Division

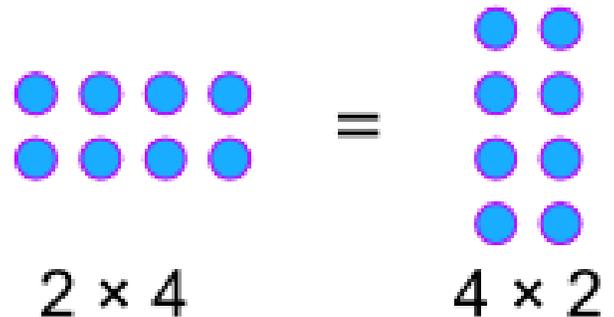
Video Links

[Unknowns Multiplication & Divisions](#)

[Solving With a Diagram](#)

[Two Step Word Problems](#)

[Area](#)



Parent Tips

Review multiplication and division math facts with your child.

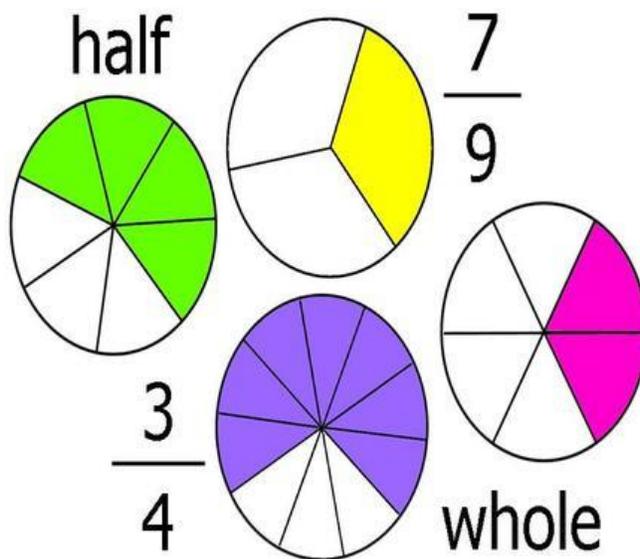
Practice drawing simple two dimensional rectangular shapes and calculating the area using multiplication.

Have your student set out groups of small objects in arrays (equal groups in rows and columns) and write the accompanying multiplication equation.

Fourth Grade Unit 5

In Unit 5, fourth grade students will use their understanding of adding and subtracting fractions and generating equivalent fractions to solve problems involving fractions and mixed numbers. Students rely on their previous work with whole numbers as fractions to compose and decompose whole numbers into fractional quantities. Data is used in this unit to support students' understanding of fractional quantities both smaller and larger than one. The following concepts will be covered in this unit:

- Adding fractions
- Subtracting fractions



Video Links

[Subtracting Fractions](#)

[Adding Fractions](#)

[Whole Numbers as Fractions](#)

[Fraction Problems](#)

Parent Tips

Continue to practice and review multiplication and division math facts – this greatly supports work with fractions.

Look for opportunities in daily life to discuss fractional parts and divide objects into equal parts.

Fifth Grade Unit 5

In Unit 5, fifth grade students will apply their understanding of volume to real-world problems. They develop efficient strategies, including the use of formulas, to compute volumes of right rectangular prisms or other three-dimensional figures that can be broken down into non-overlapping right rectangular prisms. Measurement is used in this unit as a context for operations with decimals. Students' previous experiences with decimal fractions and fraction computations are applied here to provide multiple ways of thinking about operations with decimals. Students can use their understanding of decimal-fraction equivalencies, concrete or visual models, and place value to reason about decimal quantities and operations. The following concepts will be covered in this unit:

- Measuring volume
- Compute volumes of three-dimensional figures using formulas
- Compute operations involving decimals

Video Links

[Volume of Right Prisms](#)

[Multiplying & Dividing Decimals](#)

[Converting Units](#)



Parent Tips

Begin to discuss and notice the volume of various household containers—this is also a good opportunity to talk about what units are often used to measure volume.

Look for opportunities in daily life to discuss both fractional parts of a whole and of other fractions, e.g. “What is $\frac{1}{4}$ of 20? $\frac{1}{4}$ of $\frac{1}{2}$?”