

Operation Graduation

Foundational Math Skills for Student Success

March 21, 2022



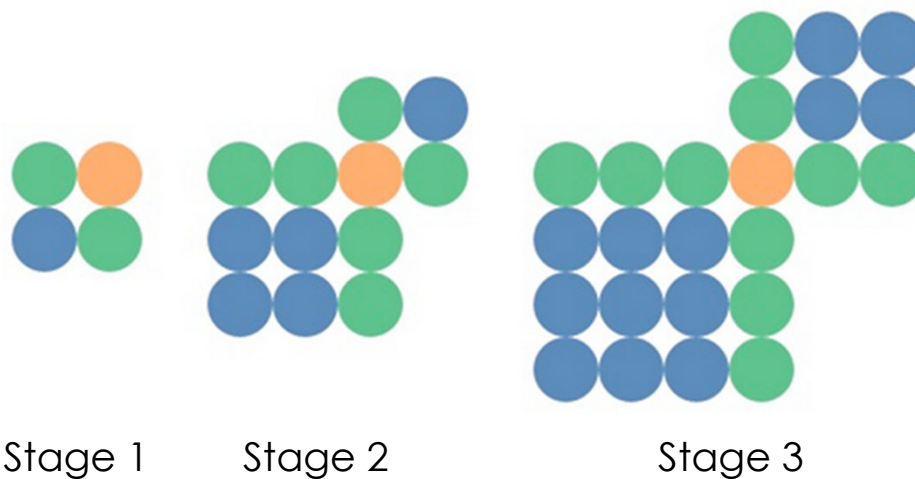
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DIVISION OF CURRICULUM & INSTRUCTIONAL SUPPORT


Pattern Task



How do you see the pattern growing?



Foundational Math Skills





[Math K-12 AKS Booklet](#)

AKS
ACADEMIC KNOWLEDGE AND SKILLS
GWINNETT COUNTY PUBLIC SCHOOLS
MATHEMATICS
2021-22 K-12 SUBJECT BOOKLET

Gwinnett's curriculum for grades K-12 is called the Academic Knowledge and Skills (AKS). The AKS for each grade level spells out the essential things students are expected to know and be able to do in that grade or subject. The AKS offers a solid base on which teachers build rich learning experiences. Teachers use curriculum guides, technology, and instructional resources to teach the AKS and to make sure every student is learning to his or her potential.

The Academic Knowledge and Skills was developed by our teachers, with input from our parents and community, in response to Gwinnett County Public Schools' mission statement:

The mission of Gwinnett County Public Schools is to pursue excellence in academic knowledge, skills, and behavior for each student resulting in measured improvement against local, national, and world-class standards.



Mathematics

In the Mathematics classroom, students grow into confident, competent problem-solvers. They develop their understanding and use of numbers as they explore how mathematics connects to the real world. As they apply their learning in context, students develop their ability to think critically, reason mathematically, and communicate effectively.

Learning in 8th grade focuses on developing an understanding of Algebra I concepts. By the end of 8th grade, students should be able to do the following:

- Use properties of rational and irrational numbers;
- Create linear, quadratic, and exponential equations that describe relationships;
- Understand and describe how to solve equations and inequalities;
- Interpret equations in a real-world context;
- Construct and compare linear, quadratic, and exponential models, using equations, graphs, tables, and verbal descriptions; and
- Summarize, represent, and interpret data.

8th grade students use a number of strategies and tools as they learn math. They use a variety of representations to demonstrate their knowledge, such as verbal/written, numeric/data-based, graphical, and symbolic. Students use technology, data, and problem-solving strategies.

[6-8 Parent AKS Brochures](#)

Questions to Ask Your Student...



- What patterns do you see?
- Can you represent your thinking in a table? Graph? Equation?
- How can you check your answer for reasonableness?
- Explain to me your thinking for this problem.
- What connections do you see between your math and future career goals?



Thank You!