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CELEBRATE BASIC MATHS SKILLS

Basic does not mean boring! There certainly is nothing dull about . . .

- . . . finding out about legends and traditions in the Olympics
- . . . measuring the sizes of tracks for a dozen different sports
- . . . learning who's broken which Olympic records
- . . . calculating the weight of a gold medal
- . . . getting to know facts about Olympic athletes from Hercules to Marjorie Jackson
- . . . figuring out how fast Michael Johnson really ran
- . . . examining Olympic history to find that the first weights were actually boulders and that early yacht sails were bedspreads



The idea of celebrating the basics is just what it sounds like—enjoying and developing the basic skills of geometry and measurement. The pages that follow are full of exercises for students that will help to review and strengthen specific, basic skills in the content area of maths. This is not just any ordinary ‘fill-in-the-blanks’ way to learn. The high-interest activities will put students to work applying a rich variety of the most important skills and strategies for working with geometric figures and for measuring. Kids will do this work while learning some fascinating facts about the Summer Olympic Games and enjoying challenging adventures with sports-related dilemmas.



The pages in this book can be used in many ways . . .

- . . . for individual students to sharpen a particular skill
- . . . with a small group needing to relearn or sharpen a skill
- . . . as an instructional tool for teaching a skill to any size group
- . . . by students working on their own
- . . . by students working under the direction of an adult.



Each page may be used to introduce a new skill or set of maths facts, reinforce a skill, or even to assess a student's ability to perform a skill.

There's more than just the 40 pages of great student activities. You'll also find a hearty appendix of resources helpful for students and teachers—including a ready-to-use test for assessing geometry and measurement content skills.

As students take on the challenges of these adventures with geometry and measurement, they will sharpen their mastery of basic skills, and will enjoy learning to the fullest. As you watch them check off the basic maths skills they've strengthened, you can celebrate with them!

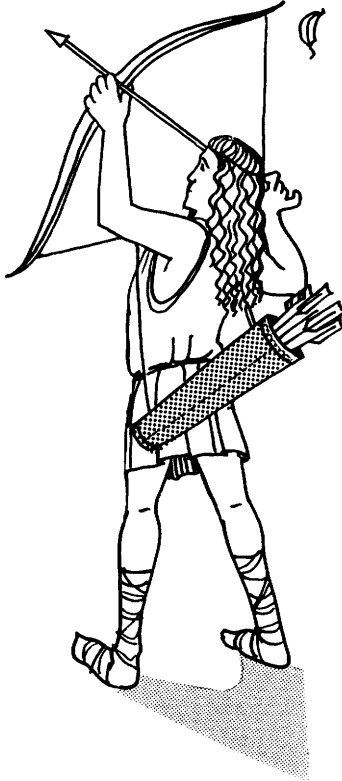
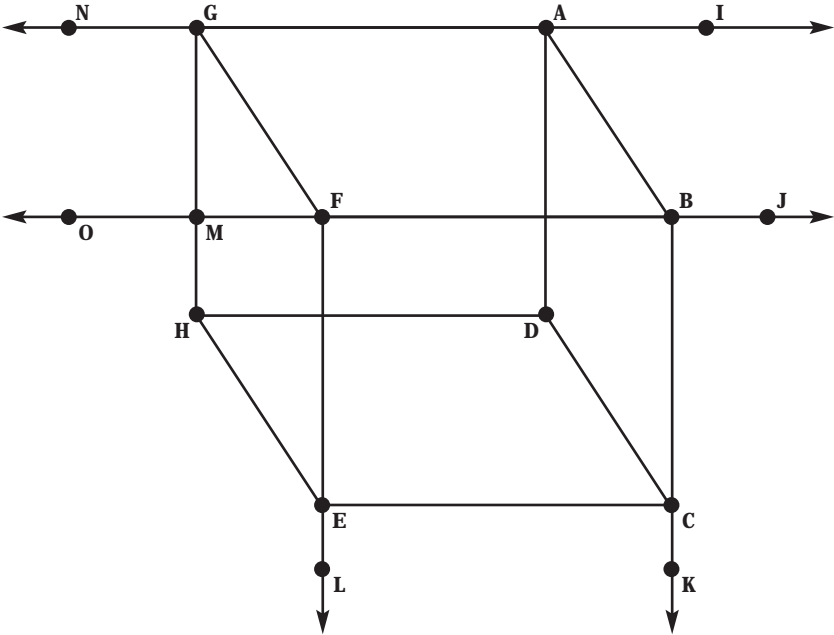


FLYING FEATHERS



There is an Olympic legend that Hercules, an archer, founded the Olympic games. Instead of shooting arrows into a target, ancient archers used live tethered doves as their targets. Using birds as targets gave birth to the saying, "Now the feathers are really flying!" Check your aim with the following problems.

Study the diagram and answer the questions below.



1. Name 10 points. _____
2. Name 2 lines. _____

3. Name 10 line segments. _____

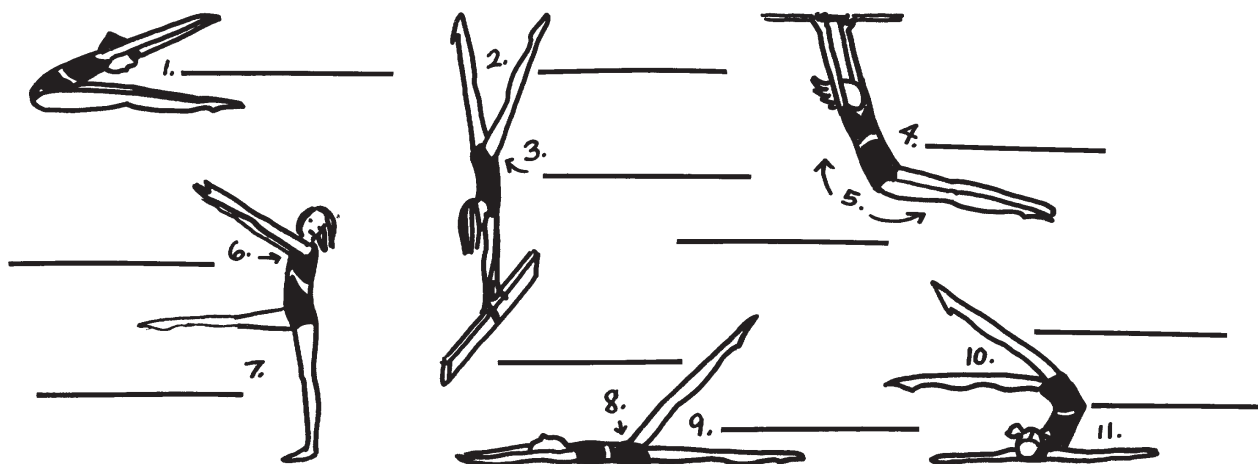
4. Name 4 pairs of parallel line segments. _____
5. Name 2 pairs of perpendicular line segments. _____
6. Name 6 rays. _____
7. Planes are named by giving the vertices of a face of a figure. Name 5 planes. _____

Name _____

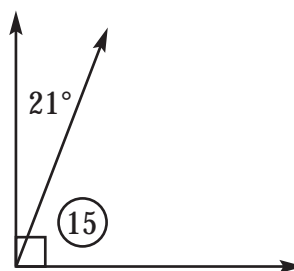
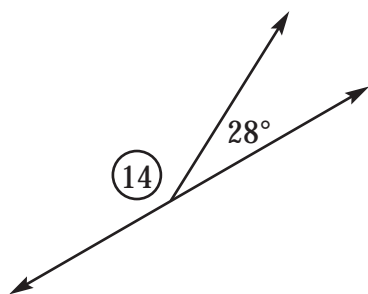
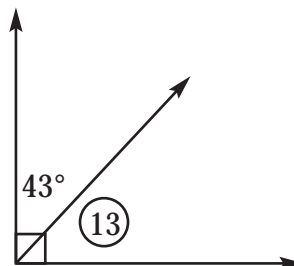
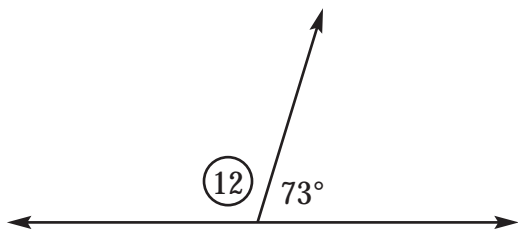
SOME SPECTACULAR ANGLES

Gymnasts get their bodies into the most spectacular positions. If you watch them, you'll see all kinds of angles represented in their manoeuvres.

A. Identify the numbered angle of each gymnast's body as **acute**, **obtuse** or **right**.



B. Identify these angles as either **complementary** or **supplementary** angles. Then find the measure of each numbered angle.



Name _____

DIFFERENT—YET THE SAME

The Olympic Games capture attention like no other sporting event. An estimated 35 billion people watch this international competition. The Olympics bring together people from almost 200 different countries. The athletes and fans share the common interest in the sports contests, but they represent widely diverse backgrounds. The shapes you run into at the Olympics are just as diverse, even if they share common characteristics. Many of them are quadrilaterals (4-sided polygons) yet the quadrilaterals differ.

A. Match these different quadrilaterals with their correct definitions.

_____ 1. parallelogram	A. a parallelogram with all sides and angles congruent
_____ 2. trapezoid	B. a quadrilateral with exactly one pair of parallel sides
_____ 3. rectangle	C. a parallelogram with all angles congruent
_____ 4. rhombus	D. a parallelogram with all sides congruent
_____ 5. square	E. a quadrilateral with two pairs of parallel sides

B. Colour each Olympic-related quadrilateral in this picture according to the key at the right. If one falls into 2 or more categories, colour it partially with each colour that applies.

trapezoids—blue
 parallelograms—red
 rectangles—green, white
 squares—purple
 rhombuses—yellow
 triangles—black

Name _____