	English/Language Arts	Mathematics	Social Studies
ACTIVITY			
The Shape of Things (1)	1.7.5, 1.7.10	1.4.1, 1.4.2, 1.4.3, 1.4.7	
Get In Touch With Trees (2)	1.5.2, 1.5.4, 1.7.5, 1.7.9		
Sounds Around (4)	1.7.10	1.1.10, 1.4.6	1.3.2, 1.3.3, 1.3.4, 1.3.7
The Forest of S.T. Shrew (8)	1.7.7, 1.7.10		
Tree Treasures (12)			1.3.8
Pass the Plants, Please (16)			1.3.8, 1.5.5
Tale of the Sun (18)			1.1.2, 1.5.3, 1.5.4
Environment Exchange Box (20)			1.3.4, 1.3.6, 1.3.7, 1.3.8, 1.5.5
Adopt a Tree (21)		1.5.1, 1.5.4, 1.5.5	1.3.3, 1.3.4
Trees as Habitats (22)			1.3.4, 1.3.5, 1.3.6
Bird and Worms (25)		1.1.1, 1.1.10, 1.2.1	
Every Tree for Itself (27)		1.1.1, 1.1.10, 1.5.1, 1.5.5	
Three Cheers for Trees (30)			1.3.4, 1.3.7, 1.3.8
Plant a Tree (31)			1.2.5, 1.3.3, 1.3.4, 1.3.8
A Forest of Many Uses (32)			1.3.8
Pollution Search (36)			1.2.5
Talking Trash, Not! (37)		1.1.1, 1.1.10, 1.2.1, 1.4.3, 1.5.5, 1.6.2	1.2.5, 1.3.8
How Plants Grow (41)		1.1.1, 1.1.10, 1.5.1, 1.5.4	
School Yard Safari (46)	1.7.5, 1.7.10		
Are Vacant Lots Vacant (47)		1.4.5, 1.4.6	
Field, Forest, and Stream (48)		1.1.1, 1.1.5, 1.1.10, 1.4.6, 1.5.5	
Tropical Treehouse (49)	1.7.1, 1.7.5, 1.7.9		

	English/Language Arts	Mathematics	Social Studies
ACTIVITY			
Make Your Own Paper (51)	1.7.4		1.3.8
I'd Like to Visit A Place Where… (54)	1.1.2, 1.1.18, 1.7.5		1.3.4
Planning the Ideal Community (55)	1.7.1, 1.7.4, 1.7.10		1.1.1, 1.1.2, 1.3.3, 1.3.7, 1.3.8, 1.4.1, 1.4.2
The Closer You Look (61)	1.7.4, 1.7.5, 1.7.9, 1.7.10		
How Big is Your Tree? (67)		1.1.1, 1.1.5, 1.1.10, 1.5.1, 1.5.2, 1.5.3, 1.5.4	
People, Places, Things (74)			1.3.3, 1.3.4, 1.3.7, 1.3.8, 1.4.3
Tree Cookies (76)	1.7.5, 1.7.8, 1.7.10		1.1.6, 1.3.5
Trees In Trouble (77)	1.5.1, 1.5.5, 1.7.4, 1.7.5	1.1.1, 1.1.5, 1.5.1, 1.5.4	1.3.5, 1.3.8
Signs of Fall (78)	1.7.4, 1.7.5, 1.7.9		
Tree Life Cycle (79)	1.7.1, 1.7.4		
Earth Manners (87)	1.7.1, 1.7.4, 1.7.5, 1.7.9, 1.7.10		1.2.5, 1.2.6, 1.3.8, 1.5.3
Did You Notice? (95)	1.7.1, 1.7.4, 1.7.5, 1.7.8, 1.7.9		1.1.1, 1.1.6

Grade 1

Standard 1
READING: Word Recognition, Fluency, and Vocabulary Development

Students understand the basic features of words. They see letter patterns and know how to translate them into spoken language by using phonics (an understanding of the different letters that make different sounds), syllables, and word parts (-s, -ed, -ing). They apply this knowledge to achieve fluent (smooth and clear) oral and silent reading.

Concepts About Print

1.1.2 Identify letters, words, and sentences.

PLT Activities: 54

Vocabulary and Concept Development

1.1.18 Classify categories of words.
Example: Tell which of the following are fruits and which are vegetables: bananas, oranges, apples, carrots, and peas.

PLT Activities: 18

Standard 5
WRITING: Applications (Different Types of Writing and Their Characteristics)

At Grade 1, students begin to write compositions that describe and explain familiar objects, events, and experiences. Students use their understanding of the sounds of words to write simple rhymes. Student writing demonstrates a command of Standard English and the drafting, research, and organizational strategies outlined in Standard 4 — Writing Process. Writing demonstrates an awareness of the audience (intended reader) and purpose for writing.

Using the writing strategies of Grade 1 outlined in Standard 4 — Writing Process, students:

1.5.1 Write brief narratives (stories) describing an experience.
Example: Write a short story titled *My Friend* describing an experience that is real or imagined.

PLT Activities: 77

1.5.2 Write brief expository (informational) descriptions of a real object, person, place, or event, using sensory details.
Example: Write a description of a family member, a pet, or a favorite toy. Include enough details that the reader can picture the person, animal, or object.

PLT Activities: 2

1.5.4 Use descriptive words when writing.
Example: Use varied words to describe events, people, and places, such as describing a day as a *sunny day* or *cloudy day*.

PLT Activities: 2

1.5.5 Write for different purposes and to a specific audience or person.
Example: Write a thank-you note to the store manager after a field trip to the local supermarket.

PLT Activities: 77

Standard 7
LISTENING AND SPEAKING: Skills, Strategies, and Applications

Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation (raising and lowering voice). Students deliver brief oral presentations about familiar experiences or interests that are organized around a coherent thesis statement (a statement of topic). Students use the same Standard English conventions for oral speech that they use in their writing.

Comprehension

1.7.1 Listen attentively.

PLT Activities: 49, 55, 79, 87, 95

Organization and Delivery of Oral Communication

1.7.4 Stay on the topic when speaking.

PLT Activities: 51, 55, 61, 77, 78, 79, 87, 95

1.7.5 Use descriptive words when speaking about people, places, things, and events.

PLT Activities: 1, 2, 46, 49, 54, 61, 76, 77, 78, 87, 95

Speaking Applications

1.7.7 Retell stories using basic story grammar and relating the sequence of story events by answering *who*, *what*, *when*, *where*, *why*, and *how* questions.

PLT Activities: 8

1.7.8 Relate an important life event or personal experience in a simple sequence.

PLT Activities: 76, 95

1.7.9 Provide descriptions with careful attention to sensory detail.

PLT Activities: 2, 49, 61, 78, 87, 95

1.7.10 Use visual aids, such as pictures and objects, to present oral information.

PLT Activities: 1, 4, 8, 46, 55, 61, 76, 87

Grade 1

In this technological age, mathematics is more important than ever. When students leave school, they are more and more likely to use mathematics in their work and everyday lives — operating computer equipment, planning timelines and schedules, reading and interpreting data, comparing prices, managing personal finances, and completing other problem-solving tasks. What they learn in mathematics and how they learn it will provide an excellent preparation for a challenging and ever-changing future.

The state of Indiana has established the following mathematics standards to make clear to teachers, students, and parents what knowledge, understanding, and skills students should acquire in Grade 1:

Standard 1 — Number Sense

Understanding the number system is the basis of mathematics. Students develop this understanding by first counting sets of objects and then moving on to writing numbers in figures. They learn how we group numbers in tens and ones, allowing them to write numbers up to 100. They find the number one more or one less than a given number. They put numbers up to 10 in order of size and use the terms *first*, *second*, *third*, etc. Students also learn about fractions, understanding that fractions compare a part of a set to the whole set.

Standard 2 — Computation

Fluency in computation is essential. As students learn about the whole numbers up to 100, they also learn how to add and subtract them. They use objects to join sets together (for addition) and to remove objects from sets (for subtraction). They become familiar with different ways of looking at the same number using objects and figures. They also learn that addition and subtraction are opposites of each other and that zero has special properties.

Standard 3 — Algebra and Functions

Algebra is a language of patterns, rules, and symbols. Students at this level relate word problems to number sentences in symbols, such as $7 + 6 = 13$, and learn some of the rules relating addition and subtraction. They also continue number patterns using addition.

Standard 4 — Geometry

Students learn about geometric shapes and develop a sense of space. They describe and draw simple shapes, comparing and sorting them by such attributes as size and number of sides. They learn the meaning of words, like *near* and *behind*, that relate to positions in space and use them to give and follow directions. They identify objects as two- or three-dimensional and describe the faces of solid objects. They also recognize geometric shapes in the world around them.

Standard 5 — Measurement

The study of measurement is essential because of its uses in many aspects of everyday life. Students begin their study of measurement by comparing objects' length, weight, temperature, etc. Then they become more precise and find, for example, that the length of their desk is 8 pencil-lengths. From this, they move toward understanding the need for standard units of length: inch, foot, yard, centimeter, and meter. They learn how to tell the time on a clock to the nearest half hour. They also learn about money: the values of pennies, nickels, and dimes.

Standard 6 — Problem Solving

In a general sense, mathematics is problem solving. In all mathematics, students use problem-solving skills: they choose how to approach a problem, they explain their reasoning, and they check their results. As they develop their skills with numbers, geometry, or measurement, for example, students at this level move from simple ideas to more complex ones by taking logical steps that build a better understanding of mathematics.

As part of their instruction and assessment, students should also develop the following learning skills by Grade 12 that are woven throughout the mathematics standards:

Communication

The ability to read, write, listen, ask questions, think, and communicate about math will develop and deepen students' understanding of mathematical concepts. Students should read text, data, tables, and graphs with comprehension and understanding. Their writing should be detailed and coherent, and they should use correct mathematical vocabulary. Students should write to explain answers, justify mathematical reasoning, and describe problem-solving strategies.

Reasoning and Proof

Mathematics is developed by using known ideas and concepts to develop others. Repeated addition becomes multiplication. Multiplication of numbers less than ten can be extended to numbers less than one hundred and then to the entire number system. Knowing how to find the area of a right triangle extends to all right triangles. Extending patterns, finding even numbers, developing formulas, and proving the Pythagorean Theorem are all examples of mathematical reasoning. Students should learn to observe, generalize, make assumptions from known information, and test their assumptions.

Representation

The language of mathematics is expressed in words, symbols, formulas, equations, graphs, and data displays. The concept of one-fourth may be described as a quarter, $\frac{1}{4}$, one divided by four, 0.25, $\frac{1}{8} + \frac{1}{8}$, 25 percent, or an appropriately shaded portion of a pie graph. Higher-level mathematics involves the use of more powerful representations: exponents, logarithms, π, unknowns, statistical representation, algebraic and geometric expressions. Mathematical operations are expressed as representations: +, =, divide, square. Representations are dynamic tools for solving problems and communicating and expressing mathematical ideas and concepts.

Connections

Connecting mathematical concepts includes linking new ideas to related ideas learned previously, helping students to see mathematics as a unified body of knowledge whose concepts build upon each other. Major emphasis should be given to ideas and concepts across mathematical content areas that help students see that mathematics is a web of closely connected ideas (algebra, geometry, the entire number system). Mathematics is also the common language of many other disciplines (science, technology, finance, social science, geography) and students should learn mathematical concepts used in those disciplines. Finally, students should connect their mathematical learning to appropriate real-world contexts.

Standard 1
Number Sense

Students understand symbols, objects, and pictures used to represent numbers up to 100 and show an understanding of fractions.

1.1.1 Count, read, and write whole numbers* up to 100.
Example: Read "seventy-two" for the number 72.

PLT Activities: 25, 27, 37, 41, 48, 67, 77

1.1.5 Compare whole numbers up to 10 and arrange them in numerical order.
Example: Arrange the numbers 5, 2, and 9 in order from greatest to least.

PLT Activities: 48, 67, 77

1.1.10 Represent, compare, and interpret data using pictures and picture graphs.
Example: Use a picture graph to show how many dogs, cats, etc. your friends have. Which kind of pet appears most often? Explain your answer.

PLT Activities: 4, 25, 27, 37, 41, 48, 67

* whole number: 0, 1, 2, 3, etc.

Standard 2
Computation

Students demonstrate the meaning of addition and subtraction and use these operations to solve problems.

1.2.1 Show the meaning of addition (putting together, increasing) using objects.
Example: Put together 3 pencils and 5 pencils. Tell how many pencils you have and explain what you are doing.

PLT Activities: 25, 37

Standard 4
Geometry

Students identify common geometric shapes, classify them by common attributes, and describe their relative position or their location in space.

1.4.1 Identify, describe, compare, sort, and draw triangles, rectangles, squares, and circles.
Example: Draw a square and a circle and write their names next to them.

PLT Activities: 1

1.4.2 Identify triangles, rectangles, squares, and circles as the faces* of three-dimensional objects.
Example: Look at a collection of solid objects and find triangles and squares on their sides.

PLT Activities: 1

1.4.3 Classify and sort familiar plane and solid objects by position, shape, size, roundness, and other attributes. Explain the rule you used.
Example: Group a collection of objects by something they have in common. Explain your grouping.

PLT Activities: 1, 37

1.4.5 Give and follow directions for finding a place or object.
Example: Show someone how to get to the school library by making a map or diagram.

PLT Activities: 47

1.4.6 Arrange and describe objects in space by position and direction: near, far, under, over, up, down, behind, in front of, next to, to the left or right of.
Example: Name objects that are near your desk and objects that are in front of it. Explain why there may be some objects in both groups.

PLT Activities: 4, 47, 48

1.4.7 Identify geometric shapes and structures in the environment and specify their location.
Example: Find as many rectangles as you can in your classroom. Record the rectangles that you found by making drawings or using a camera.

PLT Activities: 1

* face: a flat side, like the front of a cereal box

Standard 5
Measurement

Students learn how to measure length, as well as how to compare, order, and describe other kinds of measurement.

1.5.1 Measure the length of objects by repeating a nonstandard unit or a standard unit.
Example: Measure the length of your desk in pencil-lengths.

PLT Activities: 21, 27, 41, 67, 77

1.5.2 Use different units to measure the length of the same object and predict whether the measure will be greater or smaller when a different unit is used.
Example: If you measure your desk with a shorter pencil, will the number of pencil-lengths be more or less? Measure the desk to find out your answer.

PLT Activities: 67

1.5.3 Recognize the need for a fixed unit of length.
Example: Give students different lengths of string and have them measure the width of a doorway. Talk about why their answers are different and the kinds of problemsthis can cause.

PLT Activities: 67

1.5.4 Measure and estimate the length of an object to the nearest inch and centimeter.
Example: Have some students measure the width of the doorway in inches and some measure it in centimeters. Discuss why these are better ways of measuring than using the pieces of string.

PLT Activities: 21, 41, 67, 77

1.5.5 Compare and order objects according to area, capacity, weight, and temperature, using direct comparison or a nonstandard unit.
Example: Use a scale or balance to see how many crayons weigh the same as a shoe.

PLT Activities: 21, 27, 37, 48

Standard 6
Problem Solving

Students make decisions about how to set up a problem.

1.6.2 Use tools such as objects or drawings to model problems.
Example: In the first example, show the number 10 using addition of whole numbers by counting out ten blocks. Divide them into two piles and write a number sentence that shows the number in each pile of blocks.

PLT Activities: 37

GRADE 1

The Home, School, and Nearby Environments

Students in Grade 1 examine changes in their own communities over time and explore the way people live and work together. They begin to understand their rights and responsibilities as citizens as they interact with home, school, and nearby environments.

The Indiana's K – 8 academic standards for social studies are organized around five content areas. The content area standards and the types of learning experiences they provide to students in Grade 1 are described below. On the pages that follow, age-appropriate concepts are listed underneath each standard. Skills for thinking, inquiry, and participation in a democratic society are integrated throughout. Specific terms are defined and examples are provided when necessary.

Standard 1 — History
Students will identify continuity and change in the different environments around them, including school and neighborhood communities, and identify individuals, events, and symbols that are important to our country.

Standard 2 — Civics and Government
Students will explain the meaning of government; explain why rules and laws are needed in the school and community; identify individual rights and responsibilities; and use a variety of sources to learn about the functions of government and roles of citizens.

Standard 3 — Geography
Students will identify the basic characteristics of maps and globes and explain basic facts concerning the relationship of the sun to daily and seasonal weather. They will identify selected geographic characteristics of their home, school, and neighborhood.

Standard 4 — Economics
Students will explain how people in the school and community use goods and services and make choices as both producers and consumers.

Standard 5 — Individuals, Society, and Culture
Students will understand that they are individuals who interact with other individuals and groups; take responsibility for resolving conflicts and working respectfully with others; and examine the ways that similarities and differences in customs, celebrations, recreation, and the arts benefit the community.

Standard 1
History

Students will identify continuity and change in the different environments around them, including school and neighborhood communities, and identify individuals, events, and symbols that are important to our country.

Historical Knowledge

1.1.1 Identify examples of things that have changed and things that have remained the same as students compare their lives with the lives of family members, such as parents and grandparents.
Example: People today use different kinds of technology, such as computers, in comparison to the types of technology people used in the past.

PLT Activities: 55, 95

1.1.2 Compare past and present similarities and differences in daily life by using biographies, oral histories, and folklore.
Example: Aspects of daily life might include roles of men, women, and children, styles of dress, work within and outside the home, popular games, transportation, schooling, and manners.

PLT Activities: 18, 55

Chronological Thinking

1.1.6 Use terms related to time to order events sequentially that have occurred in the school.
Example: Identify and order school events using the terms "past" and "present;" discuss national holidays and historical events associated with the holidays.

PLT Activities: 76, 95

Standard 2
Civics and Government

Students will explain the meaning of government, explain why rules and laws are needed in the school and community, identify individual rights and responsibilities, and use a variety of sources to learn about the functions of government and roles of citizens.

Roles of Citizens

1.2.5 Suggest ways that students' actions can contribute to the common good of the community.
Example: Students help to keep the classroom and school clean by properly disposing of trash.

PLT Activities: 31, 36, 37, 87

1.2.6 Identify civic virtues that are needed to be a good citizen.
Example: Fairness, honesty, compassion, responsibility.

PLT Activities: 87

Standard 3
Geography

Students will identify the basic characteristics of maps and globes and explain basic facts concerning the relationship of the sun to daily and seasonal weather. They will identify selected geographic characteristics of their home, school, and neighborhood.

The World in Spatial Terms

1.3.2 Identify the cardinal directions (north, south, east, west) on maps and globes.

PLT Activities: 4

Places and Regions

1.3.3 Identify the relative locations* of places in the school setting.
Example: The relative location of the school might be described as "across the road from the fire station" or "near the river."

PLT Activities: 4, 21, 31, 55, 74

1.3.4 Identify physical features* and human features* in the geography of school and community.

PLT Activities: 4, 20, 21, 22, 30, 31, 54, 74

* relative location: the location of a place in relation to another place or places
* physical features: geographic features that occur in nature, such as land and water forms, natural vegetation, and wildlife
* human features: features created by humans, such as farms, cities, buildings, and roads

Physical Systems

1.3.5 Explain the effect of seasonal changes on plants, animals, and people.
Example: Some animals hibernate in winter; people may wear lighter-weight clothing in summer; most plants exhibit new growth in spring.

PLT Activities: 22, 76, 77

1.3.6 Observe and record the physical processes related to weather on a daily basis.
Example: Rainy, sunny, cloudy, warm, cold.

PLT Activities: 20, 22

Human Systems

1.3.7 Draw simple maps that show how land is used in the school and local community.
Example: Draw maps of the school setting that show the playground and different parts of the school building; make maps that show where people live and work.

PLT Activities: 4, 20, 30, 55, 74

Environment and Society

1.3.8 Give examples of natural resources — such as water, trees, plants, and soil — and describe how people in the school and community use these resources.

PLT Activities: 12, 16, 20, 30, 31, 32, 37, 51, 55, 74, 77, 87

Standard 4
Economics

Students will explain how people in the school and community use goods and services and make choices as both producers and consumers.

1.4.1 Identify goods* that people use.

PLT Activities: 55

1.4.2 Identify services* that people do for each other.

PLT Activities: 55

1.4.3 Compare and contrast different jobs people do to earn income.

PLT Activities: 74

* goods: tangible objects, such as food or toys, that can satisfy people's wants
* services: actions that someone does for someone else, such as dental care or trash removal

Standard 5
Individuals, Society, and Culture

Students will understand that they are individuals who interact with other individuals and groups; take responsibility for resolving conflicts and working respectfully with others; and examine the ways that similarities and differences in customs, celebrations, recreation, and the arts benefit the community.

1.5.3 Give examples of how people show concern, respect each other, behave responsibly in a group, and resolve differences peacefully.

PLT Activities: 18, 87

1.5.4 Demonstrate the importance of treating others as they would wish to be treated and practice ways of resolving differences peacefully.

PLT Activities: 18

1.5.5 Compare similarities and differences in customs, foods, play, recreation, and celebrations of families in the community.

PLT Activities: 16, 20