

CENTER POINT-URBANA MIDDLE SCHOOL

Seventh Grade Core Curriculum Guide

CONTENTS:

- Reading and Language Arts
- Mathematics
- Science
- Social Studies
- Physical Education

URBANA-CENTER POINT MIDDLE SCHOOL

READING EXPECTATIONS

7TH GRADE READING - Students will . . .

WORD ATTACK SKILLS

1. Determine the definition, various meanings, and structure of content-specific vocabulary by using syntax (parts of speech), context clues, and phonetics.

REFERENCE MATERIALS

2. Demonstrate the ability to use glossaries, dictionaries, and indexes.

COMPREHENSION

3. Distinguish between statements of fact and opinion.
4. Sequence events.
5. Follow a series of written directions in a written text.
6. Determine the stated or implied main idea and supporting details in text.
7. Read for literal comprehension.
8. Paraphrase and summarize information from a variety of written works.
9. Identify cause and effect.

INFORMATIONAL TEXT

10. Interpret visual information, for example: maps, lists, flowcharts, graphs, tables, charts, diagrams, and timelines.
11. Identify literary elements such as character, plot, and setting.
12. Identify conflict.

URBANA-CENTER POINT MIDDLE SCHOOL

MATHEMATICS EXPECTATIONS AND CURRICULUM

7TH GRADE MATH - Students will . . .

NUMERATION AND NUMBER THEORY

1. *Break number down into prime factors.*

DIVISION

2. Know and use divisibility for 2, 3, 5, 9 and 10

FRACTIONS

3. Identify greatest common factors for sets of numbers
4. Identify least common multiples for sets of numbers
5. Identify reciprocals
6. Place rational numbers on a number line
7. *Add and subtract mixed numbers.*
8. *Compare and order fractions.*
9. *Multiply and divide a fraction by a mixed number.*
10. *Show the relationships among fractions, decimals and percentages.*
11. *Round and estimate fractions.*

GEOMETRY

12. Identify sectors
13. Identify similar figures
14. Identify congruent figures
15. Identify a coordinate plan, quadrant, and ordered pairs
16. Understand the rule of Pythagoras
17. Identify shapes of polygons
18. Find the perimeter of polygons
19. Find the circumference of polygons
20. Find the area of two dimensional shapes (triangles, squares, rectangles, parallelograms, trapezoids, and circles)
21. Find the surface area of prisms, cylinders and pyramids
22. Find the volume of three dimensional shapes (Prisms and cylinders)
23. *Identify symmetry in objects. (line)*
24. *Identify complementary and supplementary angles.*
25. *Identify a polygon.*
26. *Know the characteristics of triangles by side & angle.*
27. *Know the formula for circumference of a circle.*
28. *Know the formulas for the area of parallelograms, triangles and circles.*
29. *Identify basic geometric items (point, plane, line, line segments, ray, angle, vertex, parallel line, perpendicular line).*

ALGEBRAIC THINKING

30. *Use order of operations.*
31. *Solve one step equations using addition or subtraction.*

MEASUREMENT

32. *Estimate customary lengths.*

STATISTICS AND PROBABILITY

33. *Give the range, mode, median, and mean of a set of numbers.*

RATIO AND PERCENT

34. *Find the percent of a number.*
35. Find what percent one number is of another.

URBANA-CENTER POINT MIDDLE SCHOOL

SCIENCE CURRICULUM

7th Grade Science – Students will . . .

SCIENTIFIC INQUIRY

1. Use appropriate tools (including computer hardware and software) and techniques to gather, analyze, and interpret scientific data.
2. Understand the nature of scientific explanations (e.g., emphasis on evidence; use of logically consistent agreements; use of scientific principles, models, and theories; acceptance or displacement based on new scientific evidence).
3. Design and conducts a scientific investigation (e.g., formulates questions, designs and executes investigations, interprets data, synthesizes evidence into explanations, proposes alternative explanations for observations, critiques explanations and procedures).

LIFE SCIENCE (Living Organisms and/or Ecosystems)

Know about the diversity and unity that characterize life.

4. Know ways in which living things can be classified (e.g. taxonomic groups of plants, animals, and fungi; groups based on the details of organisms' internal and external features; groups based on functions served within an ecosystem such as producers, consumers, and decomposers).
5. Know evidence that supports the idea that there is unity among organisms despite the fact that some species look very different (e.g., similarity of internal structures in different organisms, similarity of chemical processes in different organisms, evidence of common ancestry).

Know the general structure and functions of cells in organisms.

6. Know that all organisms are composed of cells, which are the fundamental units of life, most organisms are single cells, but other organisms (including humans) are multicellular.
7. Know the level of organization in living systems, including cells, tissues, organs, organ systems, whole organisms, and ecosystems, and the complementary nature of structure and function at each level.

Understand basic structures and functions of ecosystems.

8. Know ways in which species interact and depend on one another in an ecosystem (e.g., producer/consumer, predator/prey, parasite/host, relationships that are mutually beneficial or competitive)
9. Know that all individuals of a species that occur together at a given place and time make up a population and all populations living together and the physical factors with which they interact compose an ecosystem
10. Know factors that affect the number and types of organisms and ecosystem can support (e.g., available resources, biotic factors such as quantity of light and water, range of temperatures, and soil composition; disease; competition from other organisms within the ecosystem; perdition)

URBANA-CENTER POINT MIDDLE SCHOOL

SOCIAL STUDIES CURRICULUM

7th Grade Social Studies

World Geography

Students will study the following areas of the world:

Africa

Europe

The Mid-East

Asia

Students are expected to know and be able to:

1. Construct and use maps, globes, and graphs to analyze factors influencing the region.
2. Identify the physical geography of the region: climate, resources, and landforms.
3. Analyze the impact, significance, and distribution of natural resources.
4. Understand the economic system of the region.
5. Identify factors that created and affect the political structure of the region.
6. Identify and interpret ethnic and religious factors that have impacted individuals, groups, and institutions.
7. Relate current events to the region.
8. Apply knowledge of facts & concepts drawn from history to the modern day region.
20. 9. Analyze examples of conflict, cooperation, and interdependence among groups, societies and nations.

URBANA-CENTER POINT MIDDLE SCHOOL

PHYSICAL EDUCATION CURRICULUM

7th Grade Physical Education - Students will . . .

1. Learn basic skills for each activity.
2. Learn and play the basic rules for each activity.
3. Develop coordination and ability through participation with others.
4. Develop interpersonal relationships and work cooperative with other students in activities.
5. Develop cardio respiratory fitness.
6. Develop an appreciation for physical activity and body fitness.

