

ALIGNMENT OF SCOPE AND SEQUENCE WITH NEW YORK STATE STANDARDS FOR GRADES 3-8

The following chart shows how the Scope and Sequence aligns with the science standards for grades 3-8 for New York State. The columns are the principles and major strands of concepts on the conceptual flow diagram for that principle; the rows are the state standards. For New York, there are multiple

standards underlying each key question. There are three levels of alignment:

- [blank] = no alignment
- x = aligns with one standard
- XX = aligns with multiple standards

| New York State Standards | Principle 1 | | | Principle 2 | | Principle 3 | | Principle 4 | | Principle 5 | | Principle 6 | | | Principle 7 | | |
|---|-------------|---|---|-------------|----|-------------|---|-------------|---|-------------|----|-------------|---|----|-------------|---|---|
| | A | B | C | A | B | A | B | A | B | A | B | A | B | C | A | B | C |
| Grade 3 | | | | | | | | | | | | | | | | | |
| What are some of the properties of matter? | x | | | | x | | | | | | | | | | | | |
| What are some ways that energy can be transformed from one form to another? | | | | | | x | x | x | | x | | | | | | | |
| How do simple machines help us move objects? | | | | | | | | | | | | | | | | | |
| How are plants and animals well-suited to live in their environments? | | | | | | | | | x | x | XX | | | | | | x |
| Grade 4 | | | | | | | | | | | | | | | | | |
| What role do plants and animals play in their environment? | | | | | | | | | x | x | x | x | | x | x | | x |
| What are the properties of electricity and magnetism? | | | | | | | | | | | | | | | | | |
| What makes water so special? | x | x | | | | | x | | | | | x | | | | | |
| How do natural events affect our world? | x | x | | x | XX | | | | | | | | | | | | |
| Grade 5 | | | | | | | | | | | | | | | | | |
| How do scientists gather and share information? | | | | | | | | | | | | | | | | | |
| What are the processes that help shape the land? | | | x | | x | | | | | | | | | | | | |
| How does nutrition and exercise affect our health? | | | | | | | | | | | | | | | | | |
| How are plants and animals in an ecosystem connected? | | | | | | | | | x | x | x | x | | XX | x | | x |

| NY State Standards | Principle 1 | | | Principle 2 | | | Principle 3 | | | Prin. 4 | | Principle 5 | | | Principle 6 | | | | | Principle 7 | | | |
|---|-------------|----------|----------|-------------|----------|----------|-------------|----------|----------|----------|----------|-------------|----------|----------|-------------|----------|----------|----------|----------|-------------|----------|----------|--|
| | A | B | C | A | B | C | A | B | C | A | B | A | B | C | A | B | C | D | E | A | B | C | |
| Grade 6 | | | | | | | | | | | | | | | | | | | | | | | |
| How does energy play a role in our lives? How do machines impact our lives? | | | x | x | | | | | | | | | | | | | | | | | | | |
| How do matter and energy interact to produce weather patterns? | x | x | | | | | XX | XX | | | | | | | x | | x | | | | | | |
| How does the transfer of matter and energy through biological communities support diversity of living things? | | | | | | | | | x | x | x | XX | x | x | | x | | | | | | | |
| How is interdependence essential in maintaining life on Earth? | | | | | | | | | x | x | | | x | | | | | x | | | | | |
| Grade 7 | A | B | C | A | B | C | A | B | C | A | B | A | B | C | A | B | C | D | E | A | B | C | |
| How do we as scientists gather and interpret evidence that Earth is continually changing? | XX | | | XX | x | XX | x | | | | x | | | | | | | | | | | | |
| How do the properties and interactions of matter and energy explain physical and chemical change? | | x | | | | | | | | | | | | | | | | | | | | | |
| How do human body systems function to maintain homeostasis? | | | | | | | | | | | | | | | | | | | | | | | |
| How is homeostasis maintained in other organisms? | | | | | | | | | | x | x | | | XX | | | | | | | | | |
| Grade 8 | A | B | C | A | B | C | A | B | C | A | B | A | B | C | A | B | C | D | E | A | B | C | |
| How does life on Earth continue and adapt in response to environmental change? | | | | | | | | | | | x | | x | x | | | | | | | | | |
| How do we apply the laws of motion to explain the movement of objects on Earth? | | | | | | | | | | | | | | | | | | | | | | | |
| What roles do forces play in the patterns and stability of the solar system? | | | x | | | | | | | | | | x | | | | | | | | | | |
| How does human consumption of resources impact the environment and our health? | | | x | | | | | | x | | | | | | | x | | XX | x | XX | | | |