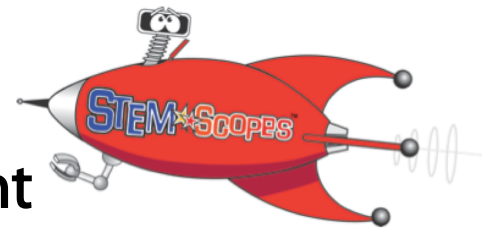


# STEMscopes™ STAAR Alignment Grade 8 Science Assessment



| Readiness SCOPES                                                                                                                                                      |                                  | Supporting SCOPES |                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------|------------------------------------|
| <b>1. Matter and Energy</b>                                                                                                                                           |                                  |                   |                                    |
| 8.5A                                                                                                                                                                  | Atoms                            | 7.5C              | Energy Flow Through Systems        |
| 8.5B                                                                                                                                                                  | Protons and Electrons            | 7.6A              | Organic Compounds                  |
| 8.5C                                                                                                                                                                  | Periodic Table                   | 7.6B              | Physical and Chemical Changes      |
| 8.5DF                                                                                                                                                                 | Chemical Formulas and Equations* | 6.5A              | Elements and Compounds             |
| 8.5E                                                                                                                                                                  | Chemical Reactions               | 6.6A              | Metals, Non-metals, and Metalloids |
|                                                                                                                                                                       |                                  | 6.6B              | Density                            |
| <b>2. Force, Motion, and Energy</b>                                                                                                                                   |                                  |                   |                                    |
| 8.6A                                                                                                                                                                  | Unbalanced Forces                | 8.6B              | Speed, Velocity, and Accelerations |
| 8.6C                                                                                                                                                                  | Laws of Force and Motion         | 7.7A              | Situations of Force                |
|                                                                                                                                                                       |                                  | 6.8A              | Potential and Kinetic Energy       |
|                                                                                                                                                                       |                                  | 6.8BCD            | Changes in Force and Motion        |
|                                                                                                                                                                       |                                  | 6.9C              | Energy Transformations             |
| <b>3. Earth and Space</b>                                                                                                                                             |                                  |                   |                                    |
| 8.7A                                                                                                                                                                  | Rotation and Revolution          | 8.7C              | Ocean Tides                        |
| 8.7B                                                                                                                                                                  | Lunar Cycle                      | 8.8B              | The Sun                            |
| 8.8A                                                                                                                                                                  | Components of the Universe       | 8.8C              | Electromagnetic Spectrum           |
| 8.9AB                                                                                                                                                                 | Plate Tectonic Theory*           | 8.8D              | Light Years                        |
| 8.9C                                                                                                                                                                  | Erosional Features               | 8.10A             | The Sun's Energy                   |
|                                                                                                                                                                       |                                  | 8.10B             | Weather Maps                       |
|                                                                                                                                                                       |                                  | 8.10C             | Oceans and Weather                 |
|                                                                                                                                                                       |                                  | 7.8C              | Watershed                          |
|                                                                                                                                                                       |                                  | 6.11B             | Gravity                            |
| <b>4. Organisms and Environments</b>                                                                                                                                  |                                  |                   |                                    |
| 8.11A                                                                                                                                                                 | Relations in a Food Web          | 8.11D             | Human Effect on Resources          |
| 8.11B                                                                                                                                                                 | Interdependence                  | 7.10BC            | Ecosystems and Environments        |
| 8.11C                                                                                                                                                                 | Environmental Changes            | 7.11A             | Identification of Organisms        |
|                                                                                                                                                                       |                                  | 7.11BC/.12A       | Adaptations of Species             |
|                                                                                                                                                                       |                                  | 7.12B             | Systems of the Human Body          |
|                                                                                                                                                                       |                                  | 7.12D             | Plant and Animal Cell Organelles   |
|                                                                                                                                                                       |                                  | 7.12EF            | Functions of a Cell                |
|                                                                                                                                                                       |                                  | 7.14AC            | Heredity                           |
|                                                                                                                                                                       |                                  | 7.14B             | Reproduction                       |
| <b>Embedded SCOPES: Scientific Investigation and Reasoning</b>                                                                                                        |                                  |                   |                                    |
| 8.1A/4B Safety   8.1B Conservation of Resources   8.2ABCDEFG Science Process Skills   8.3AB Scientific Reasoning   8.3C Models   8.3D History of Science   8.4A Tools |                                  |                   |                                    |