

Course Syllabus



Science Academies for Grades K–4, Part 1

Lessons	Sections	Activities
1. Laying the Foundation	1.1 Welcome to the Course! 1.2 Teaching K–4 Science Is Important 1.3 Change	<ul style="list-style-type: none"> ○ Instructional videos
2 Elementary Science TEKS Overview	2.2 Scientific Processes and Science Concepts 2.3 Elementary Science Strands 2.4 Why Force, Motion, and Energy?	<ul style="list-style-type: none"> ○ Reference elementary science TEKS ○ Instructional videos
3 Force, Motion, and Energy Vertical Alignment	3.2 TEKS Vertical Alignment 3.3 Vocabulary Vertical Alignment 3.4 The Ladder Comparison	<ul style="list-style-type: none"> ○ Vertical alignment activity ○ Discussion board ○ Instructional video
4 Support Frameworks	4.2 Frameworks Video 4.3 Digging Deeper Into the Support Frameworks 4.4 Success	<ul style="list-style-type: none"> ○ Instructional videos
5 5E Lesson Model	5.1 5E Lesson Model Overview	<ul style="list-style-type: none"> ○ Instructional video ○ Course Foundation and Components Assessment
6 Grade 4: Electrifying Energy	6.1 Lesson Introduction 6.2 Engage: Observations 6.3 Explore: Exploring Energy 6.4 Explain: Three-Ring Circuit Circus 6.5 Elaborate: Conductors and Insulators 6.6 Evaluate: Electrifying Energy 6.7 Grade 4 Energy Lesson Debrief 6.8 Grade 5 STAAR® Released Test Question 6.9 Lesson Summary	<ul style="list-style-type: none"> ○ Instructional videos ○ Interactive animations ○ Student book
7 TEKS Deconstruction	7.1 TEKS Deconstruction	<ul style="list-style-type: none"> ○ Reference elementary science TEKS
8 Kindergarten: Energy Is Everywhere	8.2 Lesson Introduction 8.3 Engage: Energy Is Everywhere 8.4 Explore: Exploring Energy 8.5 Explain: Energy Mysteries 8.6 Elaborate: Observing Energy 8.7 Evaluate: Energy	<ul style="list-style-type: none"> ○ Instructional videos ○ Interactive animations ○ Student book

	Assessment 8.8 Lesson Summary	
9 Grade 1: Energy in Everyday Life	9.2 Lesson Introduction 9.3 Engage: Identifying Energy 9.4 Explore: Exploring Energy 9.5 Explain: Letters to My Energy Superheroes 9.6 Elaborate: Forms of Energy Sort 9.7 Evaluate: Letter to My Superhero 9.8 Lesson Summary	<ul style="list-style-type: none"> ○ Interactive animations ○ Student book
10 Grade 2: Increasing and Decreasing Energy	10.2 Lesson Introduction 10.3 Engage: Energy Equations 10.4 Explore: Exploring Increasing and Decreasing Energy 10.5 Explain: Energy Effects 10.6 Elaborate: Energy Increase or Decrease? 10.7 Evaluate: Give Us the Story 10.8 Lesson Summary	<ul style="list-style-type: none"> ○ Interactive animations ○ Instructional videos
11 Grade 3: Exploring Energy	11.2 Lesson Introduction 11.3 Engage: Observing Energy 11.4 Explore: Exploring Energy 11.5 Explain: Energy Made Easy 11.6 Elaborate: Energy All-in- One 11.7 Evaluate: Exploring Energy Assessment 11.8 Energy Strand Summary	<ul style="list-style-type: none"> ○ Instructional videos
12 Energy Strand Summary and Vertical Alignment	12.2 Energy Strand Main Idea 12.3 Energy Strand Vertical Alignment 12.4 Grade 8 STAAR Released Test Question and Energy Strand Assessment	<ul style="list-style-type: none"> ○ Discussion board ○ Energy Strand Assessment
13 Force and Motion Strand Introduction	13.2 Success in High School Physics 13.3 Force and Motion TEKS for K-4	
14 Force and Motion: Engage	14.2 Kindergarten: Magnets and Materials 14.3 Grade 1: Magnets Push and Pull 14.4 Grade 2: Magnets in Everyday Life 14.5 Grade 3: Forces at Work 14.6 Grade 4: Effects of Force	<ul style="list-style-type: none"> ○ Instructional videos
15 Force and Motion: Explore	15.2 Kindergarten: Magnets and Materials 15.3 Grade 1: Magnets Push and Pull 15.4 Grade 2: Magnets in Everyday Life 15.5 Grade 3: Forces at Work 15.6 Grade 4: Effects of Force	<ul style="list-style-type: none"> ○ Instructional videos
16 Force and Motion:	16.2 Kindergarten: Magnets and Materials	<ul style="list-style-type: none"> ○ Instructional video ○ Student books

Explain	16.3 Grade 1: Magnets Push and Pull 16.4 Grade 2: Magnets in Everyday Life 16.5 Grade 3: Forces at Work 16.6 Grade 4: Effects of Force	
17 Force and Motion: Elaborate	17.2 Kindergarten: Magnets and Materials 17.3 Grade 1: Magnets Push and Pull 17.4 Grade 2: Magnets in Everyday Life 17.5 Grade 3: Forces at Work 17.6 Grade 4: Effects of Force	<ul style="list-style-type: none"> ○ Instructional videos
18 Force and Motion: Evaluate	18.2 Grade Level Assessments	<ul style="list-style-type: none"> ○ Instructional video
19 Force and Motion Strand Summary	19.2 Force and Motion Strand Summary 19.3 Force and Motion Main Idea 19.4 Force and Motion Vertical Alignment 19.5 Grade 5 STAAR Released Test Question 19.6 Force and Motion Assessment	<ul style="list-style-type: none"> ○ Reference elementary science TEKS ○ Discussion board ○ Force and Motion Assessment
20 Science Academies for Grades K-4 Top 10	20.2 Your Top 10 20.3 Our Top 10 20.4 Course Review 20.5 Science Academies for Grades K-4 Cumulative Test	<ul style="list-style-type: none"> ○ Discussion board ○ Instructional videos ○ Science Academies for Grades K-4 Cumulative Test
Required Course Assessments	In additional to completing the course lessons and activities, you must take and pass all four of the course assessments, including the 25-question cumulative test. You must receive an 80% or higher on all of the assessments to receive credit. If you do not pass, you must review the course lessons again and retake the test(s). When you have successfully completed the assessments, you will receive a certificate of completion and 12 CPE credits.	