# Science Fusion Module K: Introduction to Science and Technology Homeschool Pacing Guide

**Options for Instruction:** Two parallel paths meet the unit objectives, with a strong inquiry strand woven into each. Follow the Print Path, the Digital Path, or your customized combination of print, digital, and inquiry.

*Note:* Many of the Labs require specialized scientific equipment. Please check the materials list in the TE.

#### Unit 1: The Nature of Science

SE = S	TE = Teacher Edition			
Days	Activity Type	Print	Digital	
Unit 1 Opener Lesson 1: What Is Science?				
1-2 days	Big Idea	SE, pp. 1–3; *TE, pp. 10–11		
	Lesson	SE, pp. 4–13; *TE, pp. 20–24	Screens 1–10	
1 day	Virtual Lab		Screens 1–12	
1 day	Review	SE, pp. 14–15; *TE, p. 25		
1 day	Assessment		<sup>◊</sup> Lesson 1 Quiz	
(Optional)	Labs		<sup>†</sup> Quick Lab: What's In the Box? <sup>†</sup> Quick Lab: Investigating the Unseen	

Lesson 2: Scientific Investigations			
1-2 days	Lesson	SE, pp. 16–25; *TE, pp. 34–38	Screens 1–10
1 day	Virtual Lab		Screens 1–14
1 day	Review	SE, pp. 26–27; *TE, p. 39	
1 day	Assessment		<sup>◊</sup> Lesson 2 Quiz
1 day	Enrichment	People in Science, SE, pp. 28–29; *TE, pp. 40–41	
			<sup>†</sup> Quick Lab: Design Procedures
(Optional)	Labs		<sup>†</sup> Quick Lab: The Importance of Replication
			<sup>†</sup> Field Lab: Investigating Soil Microorganisms
Lesson 3:	Scientific Kn	owledge	
1-2 days	Lesson	SE, pp. 30–39; *TE, pp. 50–54	Screens 1–12
1 day	Virtual Lab		Screens 1–17
1 day	Review	SE, pp. 40–41; *TE, p. 55	
1 day	Assessment		<sup>◊</sup> Lesson 3 Quiz
(Optional)	Labs		<sup>†</sup> Quick Lab: Pluto on Trial
			<sup>†</sup> Quick Lab: Theory or Claim?
			<sup>†</sup> Exploration Lab: Science-Based Commercials

Lesson 4: Science and Society			
1-2 days	Lesson	SE, pp. 42–49; *TE, pp. 64–67	Screens 1–10
1 day	Virtual Lab		Screens 1–13
1 day	Review	SE, pp. 50–51; *TE, p. 68	
1 day	Assessment		<sup>◊</sup> Lesson 4 Quiz
(Optional)	Labs		<sup>†</sup> Quick Lab: Which Scientist am I? <sup>†</sup> Quick Lab: Design a Game
Unit 1 Review and Assessment			
1 day	Video-Based Project		Invaders in the Everglades
1 day	Review	SE, pp. 54–58; *TE, pp. 70–72	Online Unit Self Quiz
1 day	Assessment		$^{\diamond}$ Unit 1 Test

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Lab Manuals: Lesson Level Resources > Lesson Inquiry Resources > Lab Manuals

<sup>†</sup> Lab Datasheets can be accessed through the online Student Edition at the lesson level. Lab Datasheets: Lesson Level Resources > Lab Datasheet

<sup>6</sup> Online Assessments can be assigned to students through the Online Teacher Digital Management System. After you have assigned a Lesson Quiz or Unit Test, the assignment will appear on your student's account in the Things to Do section. Students can then take the test online, and it will be scored automatically.

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# Unit 2: Measurement and Data

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Days	Activity Type	Print	Digital	
Unit 2 Op Lesson 1:	ener Representing	) Data		
1 2 days	Big Idea	SE, pp. 59–61; *TE, pp. 82–83		
T-2 days	Lesson	SE, pp. 62–71; *TE, pp. 92–96	Screens 1–10	
1 day	Virtual Lab		Screens 1–13	
1 day	Review	SE, pp. 72–73; *TE, p. 97		
1 day	Assessment		<sup>◊</sup> Lesson 1 Quiz	
1 day	Enrichment	Think Science, SE, pp. 74–75; *TE, pp. 98–99		
(Optional)			<sup>†</sup> Quick Lab: Heart Rate and Exercise	
	Labs		<sup>†</sup> Quick Lab: Modeling Heights of Students	
			<sup>†</sup> Field Lab: Investigate Water Usage	

Lesson 2: Scientific Tools and Measurement				
1-2 days	Lesson	SE, pp. 76–85; *TE, pp. 108–112	Screens 1–15	
1 day	Review	SE, pp. 86–87; *TE, p. 113		
1 day	Assessment		<sup>◊</sup> Lesson 2 Quiz	
1 day	Enrichment	S.T.E.M., SE, pp. 88–91; *TE, pp. 114–117		
			<sup>†</sup> Quick Lab: Investigate Making Measurements	
(Optional)	Labs		<sup>†</sup> Quick Lab: Investigating Density	
			<sup>†</sup> Field Lab: Use a Sextant to Make a Map	
Lesson 3: Models and Simulations				
1-2 days	Lesson	SE, pp. 92–101; *TE, pp. 126– 130	Screens 1–12	
1 day	Virtual Lab		Screens 1–16	
1 day	Review	SE, pp. 102–103; *TE, p. 131		
1 day	Assessment		$^{\diamond}$ Lesson 3 Quiz	
			<sup>†</sup> Quick Lab: Modeling Eye Images	
(Optional)	Labs		<sup>†</sup> Quick Lab: Interpreting Models	
(			<sup>†</sup> S.T.E.M. Lab: Exploring Convection	
Unit 2 Review and Assessment				
1 day	Video-Based Project		Data from Space	
1 day	Review	SE, pp. 106–110; *TE, pp. 132– 134	Online Unit Self Quiz	
1 day	Assessment		<sup>◊</sup> Unit 2 Test	

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# Unit 3: Engineering, Technology, and Society

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Days	Activity Type	Print	Digital	
Unit 3 Op Lesson 1:	ener The Engineer	ing Design Process		
1-2 days	Big Idea	SE, pp. 111–113; *TE, pp. 148– 149		
	Lesson	SE, pp. 114–123; *TE, pp. 158– 162	Screens 1–15	
1 day	Review	SE, pp. 124–125; *TE, p. 163		
1 day	Assessment		<sup>◊</sup> Lesson 1 Quiz	
1 day	Enrichment	S.T.E.M., SE, pp. 126–129; *TE, pp. 164–167		
(Optional)			<sup>†</sup> Quick Lab: Designing a Consumer Product	
	Labs		<sup>†</sup> Quick Lab: Technology, Engineering, and Science	
			<sup>†</sup> S.T.E.M. Lab: Earthquake Engineering Design Challenge	

Lesson 2: Methods of Analysis			
1-2 days	Lesson	SE, pp. 130–137; *TE, pp. 176– 179	Screens 1–15
1 day	Virtual Lab		Screens 1–13
1 day	Review	SE, pp. 138–139; *TE, p. 180	
1 day	Assessment		<sup>◊</sup> Lesson 2 Quiz
(Optional)	Labs		<sup>†</sup> Quick Lab: Investigate Mining <sup>†</sup> Quick Lab: Air Innovation
Lesson 3:	Systems		
1-2 days	Lesson	SE, pp. 140–149; *TE, pp. 190– 194	Screens 1–17
1 day	Review	SE, pp. 150–151; *TE, p. 195	
1 day	Assessment		<sup>◊</sup> Lesson 3 Quiz
			<sup>†</sup> Quick Lab: Model a Home Heating System
(Optional)	Labs		<sup>†</sup> Quick Lab: Troubleshoot a Faulty System
			<sup>†</sup> S.T.E.M. Lab: Design a Water Treatment System
Lesson 4: Materials and Tools			
1-2 days	Lesson	SE, pp. 152–163; *TE, pp. 204– 209	Screens 1–15
1 day	Virtual Lab		Screens 1–12
1 day	Review	SE, pp. 164–165; *TE, p. 210	
1 day	Assessment		$^{\diamond}$ Lesson 4 Quiz
1 day	Enrichment	People in Science, SE, pp. 166– 167; *TE, pp. 212–213	
(Optional)	Labs		<sup>†</sup> Quick Lab: Tensile Strength Testing
			<sup>†</sup> Quick Lab: Testing an Alloy

Lesson 5: Engineering and Life Science				
1-2 days	Lesson	SE, pp. 168–177; *TE, pp. 222– 226	Screens 1–15	
1 day	Review	SE, pp. 178–179; *TE, p. 227		
1 day	Assessment		<sup>◊</sup> Lesson 5 Quiz	
(Optional)	Labs		<sup>†</sup> Quick Lab: Natural and Artificial Insulation	
			<sup>†</sup> Quick Lab: Yeast Gas Production	
Lesson 6: Engineering and Our World				
1-2 days	Lesson	SE, pp. 180–189; *TE, pp. 236– 240	Screens 1–15	
1 day	Review	SE, pp. 190–191; *TE, p. 241		
1 day	Assessment		<sup>◊</sup> Lesson 6 Quiz	
			<sup>†</sup> Quick Lab: Inventor Trading Cards	
(Optional)	Labs		<sup>†</sup> Quick Lab: Investigate Energy Efficiency	
			<sup>†</sup> S.T.E.M. Lab: Investigate Digital Information	
Unit 3 Review and Assessment				
1 day	Review	SE, pp. 194–200; *TE, pp. 242– 245	Online Unit Self Quiz	
1 day	Assessment		<sup>◊</sup> Unit 3 Test	

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