

Phenomenal SCIENCE



5

WORKBOOK

Daniela Vega López

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Pearson

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ENGINEERING AND TECHNOLOGY

Unit 1	What is the design process?	5
Lesson 1	What are the first steps of the design process?	6
Lesson 2	How do you design, develop, and test your solution?	8
Lesson 3	What are some everyday designs?	10
Self-assessment	Unit 1 Self-assessment	12



LIFE SCIENCE

Unit 2	Are all life cycles similar?	13
Lesson 1	How does new life form in the life cycle?	14
Lesson 2	What are some differences in life cycles?	16
Lesson 3	What are the stages of the human life cycle?	18
Self-assessment	Unit 2 Self-assessment	20



LIFE SCIENCE

Unit 3	What are living things?	21
Lesson 1	How are living things classified?	22
Lesson 2	What are some extraordinary organisms?	24
Lesson 3	How do organisms interact in an ecosystem?	26
Self-assessment	Unit 3 Self-assessment	28



EARTH SCIENCE

Unit 4	What mysteries does a solar system have?	29
Lesson 1	What makes up our Solar System?	30
Lesson 2	How are geocentric and heliocentric models different?	32
Lesson 3	What are natural and artificial satellites?	34
Self-assessment	Unit 4 Self-assessment	36



EARTH SCIENCE

Unit 5	Does matter really matter?	37
Lesson 1	How is matter measured?	38
Lesson 2	What are sieving and dissolving?	40
Lesson 3	What are evaporation and filtration?	42
Self-assessment	Unit 5 Self-assessment	44



PHYSICAL SCIENCE

Unit 6	What are ways that material can change?	45
Lesson 1	What are the characteristics of melting?	46
Lesson 2	What are the differences between heating and combustion?	48
Lesson 3	What are chemical changes?	50
Self-assessment	Unit 6 Self-assessment	52



PHYSICAL SCIENCE

Unit 7	What is electricity?	53
Lesson 1	How is electricity used in daily life?	54
Lesson 2	What are some electrical innovations?	56
Lesson 3	What are conductors and insulators?	58
Self-assessment	Unit 7 Self-assessment	60



PHYSICAL SCIENCE

Unit 8	What are electrical circuits?	61
Lesson 1	What are different types of circuits?	62
Lesson 2	What are the differences between simple and complex circuits?	64
Lesson 3	What determines brightness in bulbs and volume in buzzers?	66
Self-assessment	Unit 8 Self-assessment	68



PHYSICAL SCIENCE

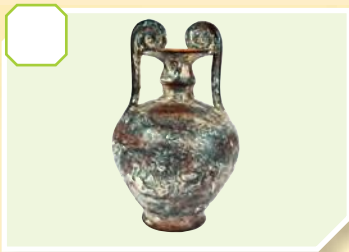
Unit 9	What is motion?	69
Lesson 1	What affects motion?	70
Lesson 2	What are speed and velocity?	72
Lesson 3	How are time, distance, and speed related?	74
Self-assessment	Unit 9 Self-assessment	76

What is the design process?

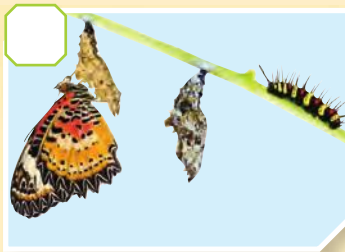


1. Check (✓) the items that are examples of technology.

1

☐


3

☐


5

☐


2

☐


4

☐


6

☐


2. Label and number the first four steps of this design process. Use words from the box.

identify the problem

choose a solution

do research

develop possible solutions

☐

Decide to design a drip water irrigation system with cheap water bottles.

☐

Look on the internet for different irrigation systems, automatic sprinklers, drip water irrigation systems, plant watering spheres, characteristics of the plants you have, and how often they need to be watered.

☐

Make a plan to make your own drip water irrigation system, and think of options with different materials, level of difficulty, and prices.

☐

You are going away for two weeks in a very dry summer season and won't be able to water your plants, which will probably die without water, and no one is around to help you water them.

3. Think of a piece of furniture you use often but is no longer in good condition. Write how you could fix it.



4. Research your problem and look for the possible materials that could help you.

5. Draw two different prototypes and show their pros and cons.

A large, empty rectangular box with a dashed border. The border is composed of small, alternating blue and green squares. The interior of the box is white and completely blank, providing space for drawing two different prototypes and showing their pros and cons.