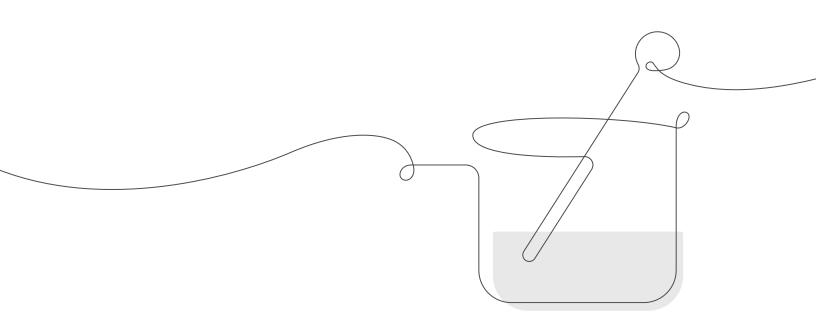
## **Amplify** Science

### **GRADE 8**

# Materials kit list





# Making hands-on more manageable

Hands-on learning is at the heart of Amplify Science, and is integrated into every unit. In order to make hands-on learning more manageable for busy teachers, Amplify Science materials are organized into unit-specific kits.

Each kit contains both consumable and nonconsumable materials, along with various print materials (e.g., Vocabulary and Key Concept cards). In addition, each kit contains enough materials to support small groups of 4–5 students.

Amplify Science also offers a starter kit that includes general science materials needed to conduct most hands-on activities and experiments for all units in our curriculum.



This image is a representative sample and does not reflect the exact number or size of tubs included with each grade level.

### Starter Kit

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-121-0



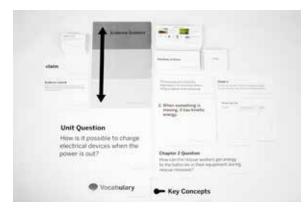
#### Hands-on materials provided in the Starter kit

| Quantity | Description                            |
|----------|--|
| 4        | magnifying glass/hand lenses, (6/pack) |
| 2        | tub                                    |
| 12       | paper, sticky note, pad                |
| 40       | safety goggles                         |
| 10       | tape, masking                          |
| 20       | tray, plastic                          |

# Unit 1 | Harnessing Human Energy

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-497-6





#### Hands-on materials provided in the Harnessing Human Energy kit

| Quantity | Description                 | Used in lesson |
|----------|-----------------------------|----------------|
| 12       | batteries, D-cell           | 1.2            |
| 4        | brads, boxes                | 3.2            |
| 20       | cables with alligator clips | 1.2            |
| 10       | electric motors             | 1.2            |
| 10       | fan blades, plastic         | 1.2            |
| 51       | film canisters              | 3.2            |
| 10       | generators, hand-crank      | 1.2            |
| 20       | rubber bands*               | 1.2            |
| 1        | solar cell kit              | 1.2            |
| 1        | springs, assorted, box      | 3.2            |
| 5        | string, balls*              | 3.2            |
| 2        | toys, wind-up               | 1.3            |

<sup>\*</sup>consumable item

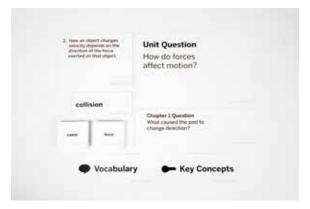
### Print materials provided in the Harnessing Human Energy kit

| Quantity            | Description                                      | Used in lesson |
|---------------------|--|----------------|
| 20 sets             | Ed-You-Swivel Claim Cards (3 cards/set)          | 3.3            |
| 20 sets             | Ed-You-Swivel Evidence Cards (8 cards/set)       | 3.3            |
| 21 sets             | Energy Source cards (7 cards/set)                | 2.2            |
| 20                  | Evidence Gradient student sheets                 | 3.3            |
| 1 set               | Large Ed-You-Swivel Claim Cards (3 cards/set)    | 3.3            |
| 1 set               | Large Ed-You-Swivel Evidence Cards (8 cards/set) | 3.3            |
| 20 sets             | Word Relationships cards (5 cards/set)           | 2.3            |
| Classroom / scienti | fic wall materials                               |                |
| 3                   | Chapter Questions                                | throughout     |
| 5 + header          | Key Concepts                                     | throughout     |
| 1 set               | scientific argumentation wall (9 items)          | throughout     |
| 1                   | Unit Question                                    | throughout     |
| 10 + header         | Vocabulary cards                                 | throughout     |

### Unit 2 | Force and Motion

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-500-3





### Hands-on materials provided in the Force and Motion kit

| Quantity | Description                                     | Used in lesson |
|----------|---|----------------|
| 20       | balls, golf                                     | 1.2, 2.1, 3.2  |
| 40       | balls, rubber (golf-ball sized)                 | 3.2            |
| 40       | balls, table tennis                             | 2.1            |
| 40       | canning jar lids and rings                      | 1.2, 1.4       |
| 20       | rulers, 12", center groove                      | 3.2            |
| 40       | spring-loaded toilet paper roll holders/spindle | 1.2, 1.4, 2.1  |

#### Print materials provided in the Force and Motion kit

| Quantity         | Description                     | Used in lesson |
|------------------|---------------------------------|----------------|
| 20               | Word Relationships cards: set 1 | 1.4            |
| 20               | Word Relationships cards: set 2 | 3.3            |
| Classroom / scie | entific wall materials          |                |
| 1                | Unit Question                   | throughout     |
| 4                | Chapter Questions               | throughout     |
| 7 + header       | Key Concepts                    | throughout     |
| 9 + header       | Vocabulary cards                | throughout     |

## Unit 3 | Force and Motion: Engineering Internship

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-502-7





#### Hands-on materials provided in the Force and Motion Engineering Internship kit

| Quantity | Description                     | Used in lesson |
|----------|---------------------------------|----------------|
| 10       | bags, self-sealing, quart size* | 2              |
| 20       | coffee filters*                 | 2              |
| 100      | cotton balls*                   | 2              |
| 10       | crates, plastic, pint size*     | 2              |
| 8 cups   | foam peanuts*                   | 2              |
| 20       | pipe cleaners*                  | 2              |
| 2        | scales, digital*                | 2              |
| 20       | straws, plastic, clear*         | 2              |
| 5        | steel wool pads*                | 2              |
| 20 feet  | string*                         | 2              |
| 100      | twist ties, 4 inch*             | 2              |

<sup>\*</sup>consumable item

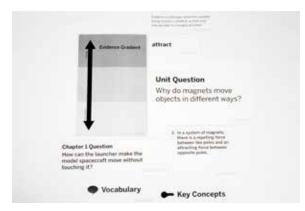
### Print materials provided in the Force and Motion Engineering Internship kit

| Quantity         | Description                  | Used in lesson |
|------------------|------------------------------|----------------|
| Classroom / scie | ntific wall materials        |                |
| 20               | Outlines to Paragraphs sheet | 8              |

# Unit 4 | Magnetic Fields

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-501-0





### Hands-on materials provided in the Magnetic Fields kit

| Quantity | Description               | Used in lesson     |
|----------|---------------------------|--------------------|
| 1        | aluminum foil, roll       | 1.2                |
| 20       | compression springs       | 2.3                |
| 20       | craft sticks              | 1.2                |
| 20       | magnet bars               | 1.2, 1.3, 2.2      |
| 10       | paper clips, boxes        | 1.2, 1.3, 3.3, 4.1 |
| 10       | pom poms                  | 2.2                |
| 10       | rubber balls              | 2.2, 3.1           |
| 20       | rulers                    | 2.2, 3.1           |
| 30       | self-sealing plastic bags | 1.2, 2.2, 3.1      |
| 20       | strong ring magnets       | 1.2, 2.2, 3.1      |
| 20       | weak ring magnets         | 1.2, 3.1           |

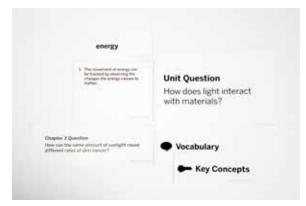
### Print materials provided in the Magnetic Fields kit

| Quantity         | Description           | Used in lesson |
|------------------|-----------------------|----------------|
| 20               | Evidence Gradient     | 1.3, 4.1       |
| Classroom / scie | ntific wall materials |                |
| 1                | Unit Question         | 1.2            |
| 4                | Chapter Questions     | throughout     |
| 8 + header       | Key Concepts          | throughout     |
| 16 + header      | Vocabulary cards      | throughout     |
| 1                | Evidence Criterion    | throughout     |

# Unit 5 | Light Waves

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-505-8





### Hands-on materials provided in the Light Waves kit

| Quantity         | Description                 | Used in lesson |
|------------------|-----------------------------|----------------|
| 80               | beads, color-changing       | 2.1            |
| 20               | binder clips                | 3.1            |
| 1                | clamp lamp                  | 1.2            |
| 10 of each color | cubes, red and green        | 3.1            |
| 10               | flashlights, incandescent   | 1.2, 2.1       |
| 10               | flashlights, UV (LED bulb)  | 2.1            |
| 10               | laser pointers              | 3.1            |
| 1                | light bulb, 60 watt         | 1.2            |
| 1                | liquid crystal paper, sheet | 1.2, 2.1       |
| 12               | mirrors                     | 3.1            |
| 5                | pipe cleaners, yellow       | 2.1            |
| 10               | spray bottles               | 3.1            |
| 20               | stars, glow-in-the-dark     | 2.1            |
| 2                | thermometers                | 1.2            |
| 10               | toys, solar-powered         | 1.2            |
| 1                | transparency paper, sheet   | 3.1            |

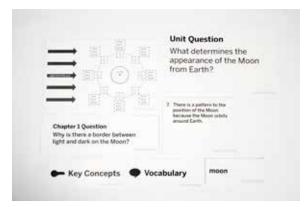
### Print materials provided in the Light Waves kit

| Quantity    | Description       | Used in lesson |
|-------------|-------------------|----------------|
| 1           | Unit Question     | throughout     |
| 4           | Chapter Questions | throughout     |
| 12 + header | Key Concepts      | throughout     |
| 10 + header | Vocabulary cards  | throughout     |

### Unit 6 | Earth, Moon, and Sun

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-511-9





#### Hands-on materials provided in the Earth, Moon, and Sun kit

| Quantity | Description                                   | Used in lesson               |
|----------|---|------------------------------|
| 50       | chopsticks, plastic                           | 1.3, 1.4, 2.2, 2.4, 3.1, 4.1 |
| 1        | clamp lamp                                    | 1.3, 2.2, 2.4, 3.1           |
| 1        | lightbulb, incandescent                       | 1.3, 2.2, 2.4, 3.1           |
| 50       | spheres, foam                                 | 1.3, 1.4, 2.2, 2.4, 3.1, 4.1 |
| 2 sheets | transparencies, printed with triangle guides* | 2.5                          |

<sup>\*</sup>consumable item

#### Print materials provided in the Earth, Moon, and Sun kit

| Quantity                              | Description                       | Used in lesson |
|---------------------------------------|-----------------------------------|----------------|
| 10                                    | Moon Phases paper model templates | 2.5            |
| Classroom / scientific wall materials |                                   |                |
| 1                                     | Unit Question                     | 1.2            |
| 4                                     | Chapter Questions                 | throughout     |
| 12 + header                           | Key Concepts                      | throughout     |
| 9 + header                            | Vocabulary cards                  | throughout     |

### Unit 7 | Natural Selection

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-492-1





### Hands-on materials provided in the Natural Selection kit

| Quantity | Description                | Used in lesson |
|----------|----------------------------|----------------|
| 20       | bags, plastic, gallon size | 2.1            |
| 60       | bags, plastic, quart size  | 1.3, 2.1       |
| 500      | counting cubes, blue       | 2.1            |
| 500      | counting cubes, green      | 2.1            |
| 500      | counting cubes, purple     | 1.3, 2.1       |

### Print materials provided in the Natural Selection kit

| Quantity                              | Description                               | Used in lesson |
|---------------------------------------|---|----------------|
| 2 sets                                | Butterfly Population cards (20 cards/set) | 1.2            |
| Classroom / scientific wall materials |   |                |
| 4                                     | Chapter Questions                         | throughout     |
| 10 + header                           | Key Concepts                              | throughout     |
| 1                                     | Unit Question                             | 1.2            |
| 13 + header                           | Vocabulary cards                          | throughout     |

### Unit 8 | Natural Selection: Engineering Internship

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-496-9





#### Hands-on materials provided in the Natural Selection Engineering Internship kit

| Quantity | Description                             | Used in lesson |
|----------|---|----------------|
| 3        | bags, self-sealing, gallon size         | 2              |
| 20       | bags, self-sealing, sandwich size       | 2              |
| 500      | counting cubes, blue                    | 2              |
| 500      | counting cubes, green                   | 2              |
| 500      | counting cubes, purple                  | 2              |
| 20       | drawstring bags, non-transparent, small | 2              |

### Print materials provided in the Natural Selection Engineering Internship kit

| Quantity | Description                                    | Used in lesson |
|----------|--|----------------|
| 20       | Modeling Population Shifts cards (6 cards/set) | 2              |
| 20       | Outlines to Paragraphs sheet                   | 8              |

## Unit 9 | Evolutionary History

TOTAL BOXES/BINS: 1 ISBN: 978-1-64089-495-2





### Hands-on materials provided in the Evolutionary History kit

| Quantity   | Description                             | Used in lesson |
|------------|---|----------------|
| 1 full kit | K'NEX® Intermediate Math & Geometry Set | 3.1            |
| 20         | self-sealing plastic bags               | 3.1            |

### Print materials provided in the Evolutionary History kit

| Quantity                              | Description                                   | Used in lesson |  |
|---------------------------------------|---|----------------|--|
| 1 set                                 | Large Species cards (9 cards/set)             | 1.2            |  |
| 20 sets                               | Species cards (9 cards/set)                   | 1.2, 2.1       |  |
| 1 set                                 | Large structure change cards (6 cards/set)    | 2.4            |  |
| 20 sets                               | Structure Change cards (6 cards/set)          | 2.4            |  |
| 10 sets                               | Word Relationship cards: set 1 (5 cards/set)  | 2.5            |  |
| 10 sets                               | Word Relationship cards: set 2 (6 cards/set)  | 3.2            |  |
| 20 sets                               | Comparing Body Structure cards (10 cards/set) | 3.3            |  |
| 20 sheets                             | Comparing Evidence tables                     | 3.3            |  |
| 20 sheets                             | Evidence Gradient                             | 4.1            |  |
| Classroom / scientific wall materials |   |                |  |
| 1                                     | Unit Question                                 | 1.2            |  |
| 4                                     | Chapter Questions                             | throughout     |  |
| 7 + header                            | Key Concepts                                  | throughout     |  |
| 11 + header                           | Vocabulary cards                              | throughout     |  |
| 1                                     | Evidence Criterion                            | throughout     |  |



