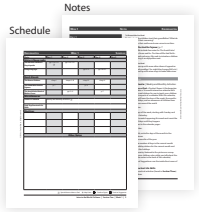
Instructor's Guide Quick Start

The BookShark™ Instructor's Guide (IG) is designed to make your educational experience as easy as possible. We have carefully organized the materials to help you and your children get the most out of the subjects covered. If you need help reading your schedule, see "How to Use the Schedule" in **Section Four**.

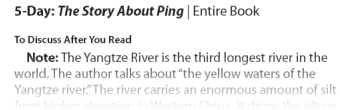
This IG includes a 36-week schedule, notes, assignments, readings, and other educational activities. For specific organizational tips, topics and skills addressed and other suggestions for the parent/teacher see **Section Three**. Here are some helpful features that you can expect from your IG.



Easy to use
Everything you need is located right after the schedule each week. If a note appears about a concept in a book, it's easy to find it right after the schedule based on the day the relevant reading is scheduled.

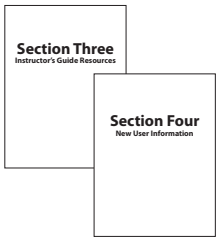
4-Day Schedule
Designed to save one day a week for music lessons, sports, field trips, co-ops, or other extra-curricular activities.

Notes
When relevant, you'll find notes about specific books to help you know why we've selected a particular resource and what we hope your children will learn from reading it. Keep an eye on these notes to also provide you with insights on more difficult concepts or content (look for "Note to Mom or Dad").


5-Day: *The Story About Ping* | Entire Book

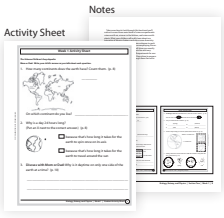
To Discuss After You Read

Note: The Yangtze River is the third longest river in the world. The author talks about "the yellow waters of the Yangtze river." The river carries an enormous amount of silt



Instructor's Guide Resources and **New User Information**
Don't forget to familiarize yourself with some of the great helps in **Section Three** and **Section Four** so you'll know what's there and can turn to it when needed.

Activity Sheets and **Answer Keys**
Activity Sheets follow each week's notes and are customized for each lesson to emphasize important points in fun ways. They are designed with different skills and interests in mind. You may want to file them in a separate binder for your student's use. Corresponding Answer Keys have been included within your weekly Notes.



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How to Use the Schedule

More notes with important information about specific books.

The [N] symbol provides you with a heads-up about difficult content. We tell you what to expect and often suggest how to talk about it with your kids.

4-Day Schedule:

This entire schedule is for a 4-Day program. We provide a blank cell on Day 5 to allow for your own activities and topics that you would like to teach your children.

Find the Activity Sheets for students directly after the Notes. Students should complete only the questions assigned.

We schedule optional assignments to be used if desired.

Find all the supplies needed for this week as well as the supplies needed for next week here.

Additional space for writing extra assignments, activities, or notes.

SCIENCE 1 | **WEEK 1** | **SCHEDULE**

Date:	Day 1 1	Day 2 2	Day 3 3	Day 4 4	Day 5 5
Usborne World of Animals	pp. 6–7	pp. 8–9	pp. 10–11		
Activity Sheet Questions	#1 [N]	#2–3	#4–5		
Optional: Do Together	Kids' Choice		The World Around You		
***Discover & Do Level 1* DVD**				Introduction to science with magnets Tracks #35–38	
Science Activities, Vol. 1				"What can a magnet do?" pp. 26–27	
Activity Sheet Questions				#6	
Supplies [N]	**We provide: BSK**—2 magnets, thumbtacks, paper clips, tape. **You provide:** Science Notebook [N]: sheets of paper tied with yarn or a spiral bound notebook or an artist's sketchbook (use for all experiments); assorted items (examples: jewelry, keys, coins, bottle caps, mug, scissors, foil, etc.); thread; paper; paints or crayons; large box.				
Shopping/Planning List	**For next week:** ruler, scissors, thread.				

Other Notes

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Day 1

Usborne World of Animals | pp. 6–7

The book says, "Earth is the only known planet to support living things." Isn't that amazing? Scientists known as astrobiologists attempt to find signs of life in space. While other planets have been discovered that appear to have the necessary conditions to support life, they are much to far to travel to or communicate with.

As the book points out, a basilisk lizard can run on water. It can do so only because it doesn't weigh much (from 2 grams up to about 7 ounces) and because it moves quickly.

Activity Sheet Questions | #1

Note to Mom or Dad: Find each week's Activity Sheets immediately after the notes and answer the questions assigned on the schedule page. Each Activity Sheet has a corresponding Answer Key page at the end of each week's notes.

Suggestion: Your Student's Activity Sheets might work more easily in a small binder for your children to keep and use as assigned. If you have more than one child using this program, extra sets of the Activity Sheets may be purchased for each child (Item #BSB1).

Occasionally we assign a "cut-out" activity. Please find these separate sheets in **Section Three** of your guide. If you like, color the sheets first, then cut them out and attach them to the worksheet.

[N] Special Note to Mom or Dad

Animals, Astronomy, and Physics | Section Two | Week 1 | 1

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Date:	Day 1 1	Day 2 2	Day 3 3	Day 4 4	Day 5 5
What's Science All About	pp. 94–101 N	pp. 102–105	pp. 106–107		
Activity Sheet Questions	#1–3 N	#4–6	#7		
Optional: Do Together	Listen to Your Children		Hot or Cold?		
Chemically Active	See the list below for supplies you will need on Day 4 N			pp. 3–6, Chap. 1, pp. 7–11 N	
Supplies	**We provide: GSK**—soap flakes. **You provide:** 1 small red cabbage, grater, stainless steel or enamel saucepan, water, strainer, mixing bowl, measuring cup, large emptied mayonnaise jar, teaspoon, white vinegar, cream of tartar, baking soda, chlorine bleach. N				
Shopping/Planning List	**For next week:** unopened bottle of soda pop, large washbasin 2/3 full of water, several small jars (jelly jars, for example), plastic disks for each jar (such as plastic covers from coffee or tennis ball cans), small bowl of hot tap water, kitchen matches, birthday cake candles (in wire holders like pipe cleaners). (**Note to Mom or Dad:** We will only list new items needed. You will use previous items from each week repeatedly.)				

Other Notes

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Day 1

What's Science All About | pp. 94–101

The little sidebar on the bottom of page 99 has some interesting wording: "What about all those substances on alien planets?" Instead of the words "alien planets," the authors could have simply said, "other planets." The word "alien" can mean all kinds of things, but is most commonly associated with speculation about alien life (i.e. little green men or space aliens). [pp. 98–99]

Activity Sheet Questions | #1–3

Activity Sheet Questions

Activity Sheets are included after the notes and are assigned on each schedule page. Each Activity Sheet has a corresponding Answer Key page following these schedule pages.

You do not have to do every question on the Activity Sheets. Feel free to adjust and/or omit activities to meet the needs of your children. We cover the same concepts repeatedly throughout the year (and years to come!) to enable students to learn "naturally" through repetition and practice over time.

We have provided a variety of activities to interest and challenge your children. Feel free to let your children do those activities that they enjoy and simply talk through others. We have provided space for you to fill in answers as your children respond verbally, or simply check off the items that you discuss.

Remember: This program is designed for you to use to meet your children's needs. It is not meant to use you!

Suggestion: Your Activity Sheets might work more easily in a small binder for your children to keep and use as assigned. If you have more than one child using this program, extra Activity Sheets can be purchased for each child.

Optional: Do Together | Listen to Your Children

Each week throughout Science 6, we will provide ideas for fun activities to do with your children. In general, we will try to make the activities actually "active": performing additional research on a particular topic, watching a video, playing a game, getting outside, or some other type of "hands-on" activity that seeks to apply what your children have been learning in a meaningful way.

Take our ideas for what they are—mere suggestions—and don't feel burdened by them. If your children don't

want to do a particular activity or have a different, better idea, by all means ditch ours and go with theirs!

Put this attitude into practice today by actively listening to your children. As they embark on their studies, what interests them most? What do they want to learn more about? What do they not have an interest in? Do they have any ideas for fun activities they could do that relate to what they're learning about?

Make a list of their thoughts and ideas. Then let them pick one to do today. In this way, you will let them know that their opinion is important. Children who feel they have an important, active role in determining what they learn about will be more engaged in their studies. Have fun and treasure these times together.

Supplies

When supplies are listed as "**We provide:**" they are materials found in your Science 6 Supplies Kit **(GSK)**. When supplies are listed as "**You provide:**" they are materials you can generally find around your home. For example:

- aspirin
- liquid laundry chlorine bleach
- curry powder
- rubber cement
- baking soda

Shipping Restrictions

Due to strict import regulations, it is illegal to ship biological matter to certain countries (including New Zealand and Australia). If you requested your science supplies to be shipped to a country with such restrictions, we have removed that kit from your order and reduced your charge accordingly.

Day 2

What's Science All About | pp. 102–105

Activity Sheet Questions | #4–6

Day 3

What's Science All About | pp. 106–107

Activity Sheet Questions | #7

Optional: Do Together | Hot or Cold?

Ask your children if they can tell the difference between something that is hot and something that is cold. What did they say? Of course! In reality, though, our bodies can sometimes fool us. Our senses are not always as accurate as we might think.

To convince your children of this fact, do a simple experiment with them. You'll need three large bowls, cold water, warm water, and hot water (just make sure it's not too hot). Ask your children to put one hand in the bowl of cold water and one hand in the bowl of hot water. Can they tell the difference? Sure!

But what about the bowl of warm water? Ask them to remove their hands from the bowls of cold and hot water and place them both in the bowl of warm water. Although both hands are now in the same temperature water (warm), do their hands tell them the same thing? No way! The hand that was in cold water will tell them the water is hot, while the hand that was in hot water will tell them the water is cold.

Explain that this is one example of how our senses can fool us. To get accurate temperatures, we must rely on special tools, such as thermometers. If they enjoyed this little experiment, let them try it on a friend or relative. Let them explain the phenomenon to their subject as they conduct the experiment.

Day 4

Chemically Active | pp. 3–6, Chapter 1 pp. 7–11

Note to Mom or Dad: Many of the experiments this year will involve using the stove or a flame. Some may involve supplies that are poisonous, inflammable, or harmful to skin, eyes, or clothing. Some substances may produce irritating fumes and should only be used in well-ventilated areas. Have your children start the habit of washing their hands carefully after using the supplies.

An adult should always be present. Follow the experiment directions in *Chemically Active* closely, and have your children carefully read all labels to respect any warnings.

We use this book all year long to introduce you and your children to the world of chemistry. ■

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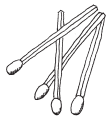
Week 1 Activity Sheets

What's Science All About?

1. Summarize what chemists study. (p. 98) *(They study substances—what they are, what they can do, what's inside them and how they can change.)*

2. What was the biggest problem with early matches? (p. 100) *(they caught fire too easily)*



3. How is Teflon® unique as a substance? (p. 101) *(It doesn't become sticky when it gets hot.)*

4. The smallest particle that can have the properties of an element is called what? (p. 104) *(an atom)*

   Atoms that stick together in groups of two or more are called *(molecules)*.

5. Oxygen gas is an element because… (pp. 104–105) *(it is a substance made from only one type of atom)*

6. Do reactions always happen when you mix substances together? Explain. (p. 105) *(No, substances can also mix without reacting or bonding together, in which case they are called a mixture rather than a chemical compound.)*

7. **Challenge!** Draw an "X" in the appropriate column to classify each substance as a mixture, element, or a compound. Feel free to use the Periodic Table of Elements on pp. 124–125 if you get stuck. (pp. 106–107)

	Mixture	Compound	Element
hydrogen			✘
water		✘	
table salt (sodium chloride)		✘	
granola	✘		
nitrogen			✘
hydrogen peroxide		✘	

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Week 1 Activity Sheets

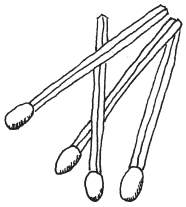
What's Science All About?

1. Summarize what chemists study. (p. 98) _____

   _____

2. What was the biggest problem with early matches? (p. 100) _____

   _____



3. How is Teflon® unique as a substance? (p. 101) _____

   _____

4. The smallest particle that can have the properties of an element is called what? (p. 104) _____

   Atoms that stick together in groups of two or more are called _____.

5. Oxygen gas is an element because… (pp. 104–105) _____

   _____

6. Do reactions always happen when you mix substances together? Explain. (p. 105) _____

   _____

   _____

7. **Challenge!** Draw an "X" in the appropriate column to classify each substance as a mixture, element, or a compound.

   Feel free to use the Periodic Table of Elements on pp. 124–125 if you get stuck. (pp. 106–107)

	Mixture	Compound	Element
hydrogen			
water			
table salt (sodium chloride)			
granola			
nitrogen			
hydrogen peroxide			

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Date:	Day 1 6	Day 2 7	Day 3 8	Day 4 9	Day 5 10
What's Science All About	pp. 108–109	pp. 110–111	pp. 112–113		
Activity Sheet Questions	#1–4	#5	#6–10		
Optional: Do Together	Changing States				
Chemically Active				Chap. 1 pp. 11–16	
Supplies	**We provide: GSK**—12-inch length of plastic tubing, plastic clay. **You provide:** unopened bottle of soda pop, large washbasin 2/3 full of water, several small jars (jelly jars, for example), plastic disks for each jar (such as plastic covers from coffee or tennis ball cans), small bowl of hot tap water, kitchen matches, birthday cake candles (in wire holders). (**Note to Mom or Dad:** We will only list new items needed. You will use previous items from each week repeatedly.)				
Shopping/Planning List	**For next week:** scissors, Scotch tape, pencil, fresh spinach or beet leaves, 2 custard cups, nail polish remover, spoon, small square of clean cloth for straining, hair dryer (optional) lacquer thinner.				

Other Notes

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Day 1

What's Science All About | pp. 108–109

Activity Sheet Questions | #1–4

Optional: Do Together | Changing States

Reinforce what your children learned about the various states of matter this week by testing them out with water. First, ask them to grab a glass of water. Let them examine it. Ask them to tell you about it. What state is it in?

Now ask them how to turn it into a solid. How would they do that? Will they need to cool it or heat it? Help them turn their glass of water into a solid by pouring it in an ice cube tray to freeze.

While you're waiting for the water to freeze, discuss how to turn it into a gas. Again, how would your children turn this liquid water into a gas? Help them pour some water into a pan to heat on the stove. How long does it take before the water reaches the appropriate temperature to turn into a gas?

Ask your children to describe the water in its gaseous form. How is it similar to the liquid form? How is it different? As soon as the water you put in the freezer has frozen, ask your children to examine it in the same way. Ask the same questions. What is their favorite form of water? Liquid to drink or swim in? Frozen to make their drinks cooler on a hot day? Why?

Day 2

What's Science All About | pp. 110–111

Activity Sheet Questions | #5

Day 3

What's Science All About | pp. 112–113

Activity Sheet Questions | #6–10

Day 4

Chemically Active | Chapter 1 pp. 11–16 ■

Week 2 Activity Sheets

What's Science All About?

1. Compare the molecules in the pictures below, then label each as either **solid**, **liquid** or **gas**. (p. 108)

(gas)

(solid)

(liquid)

2. What is the difference between the three states of matter? (p. 108)

(how much particles in the substance are moving around and how tightly packed together they are)

3. How does temperature affect the three states of matter? (p. 108) *(Temperature helps determine how much energy molecules have. The more energy molecules have, the less tightly they pack together, so molecules in a liquid have more energy (and are warmer) than those in a solid, and the same comparison is true for molecules in a gas compared to a liquid.)*

4. Solve the puzzle using the terms in the box. (p

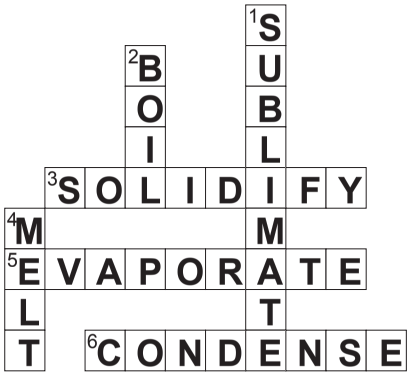
condense	boil	solidify
evaporate	melt	sublimate

Across

3) to change state from a liquid to a solid
5) to change state from a liquid to a gas
6) to change state from a gas to a liquid

Down

1) to change state directly from a gas to a solid, or from a solid to a gas
2) the agitated state of a liquid when it is at the temperature where it changes from a liquid to a gas
4) to change state from a solid to a liquid



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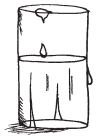
Week 2 Activity Sheets

5. Why does pressure affect a substance's current state? (p. 110) *(pressure can determine how free a substance's molecules are to move around, so changes in pressure can sometimes cause a change of state, even if there hasn't been a change in temperature)*

6. Describe some of the physical properties of pure water. (p. 112) *(Possible: it is a liquid at room temperature; its freezing point is 0°C, and it boils at 100°C. It is clear, pours easily, has no noticeable odor…)*



7. How do chemical properties differ from physical properties? (p. 112) *(Physical properties primarily describe what a substance is like on its own; chemical properties describe what a substance can do. Physical properties can be found using simple tests, but the only way to test a chemical property is to make a chemical reaction happen.)*

8. How is baking a cake an example of a chemical reaction? (p. 112) *(the new substance looks and feels different from the mixture and can no longer be separated into the original ingredients)*

9. Why won't tap water boil at 100°C? (p. 113) *(because it is impure—it contains small amounts of chlorine which is added to kill bacteria)*

10. **Challenge!** When you dissolve sugar in water at room temperature, there will come a time when the sugar stops dissolving—no matter how long you stir. At this point, we say the solution is saturated—the water has been loaded to capacity. Based on your reading, can you think of a way to get more sugar to dissolve? (p. 113) *(heat the water—the hotter water gets, the easier it becomes to dissolve things in it)*

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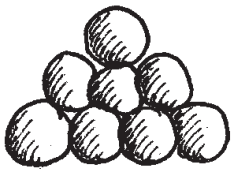
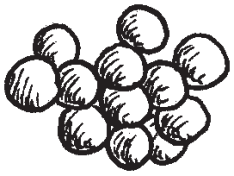
Week 2 Activity Sheets

What's Science All About?

1. Compare the molecules in the pictures below, then label each as either **solid**, **liquid** or **gas**. (p. 108)





_____ _____ _____

2. What is the difference between the three states of matter? (p. 108)

_____

_____

3. How does temperature affect the three states of matter? (p. 108) _____

_____

_____

_____

_____

4. Solve the puzzle using the terms in the box. (pp. 108–109)

condense	boil	solidify
evaporate	melt	sublimate

Across

3) to change state from a liquid to a solid

5) to change state from a liquid to a gas

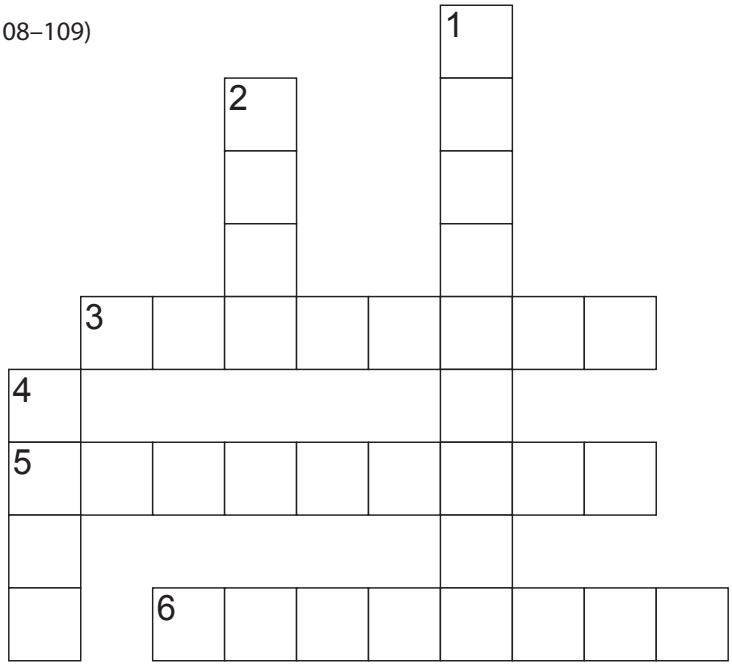
6) to change state from a gas to a liquid

Down

1) to change state directly from a gas to a solid, or from a solid to a gas

2) the agitated state of a liquid when it is at the temperature where it changes from a liquid to a gas

4) to change state from a solid to a liquid



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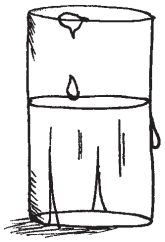
Week 2 Activity Sheets

5. Why does pressure affect a substance's current state? (p. 110) _____

_____

_____

6. Describe some of the physical properties of pure water. (p. 112)



_____

_____

_____

7. How do chemical properties differ from physical properties? (p. 112)

_____

_____

_____

8. How is baking a cake an example of a chemical reaction? (p. 112)

_____

_____

_____

9. Why won't tap water boil at 100°C? (p. 113) _____

_____

10. **Challenge!** When you dissolve sugar in water at room temperature, there will come a time when the sugar stops dissolving—no matter how long you stir. At this point, we say the solution is saturated—the water has been loaded to capacity. Based on your reading, can you think of a way to get more sugar to dissolve? (p. 113)

_____

_____

_____

_____

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Date:	Day 1 11	Day 2 12	Day 3 13	Day 4 14	Day 5 15
What's Science All About	pp. 114–115	pp. 116–117	pp. 118–119		
Activity Sheet Questions	#1–2	#3	#4–5		
Optional: Do Together			Electrolysis		
Chemically Active				Chap. 7 pp. 124–128	
Supplies	**We provide: GSK**—coffee filter paper, wooden toothpicks. **You provide:** scissors, Scotch tape, pencil, fresh spinach or beet leaves, 2 custard cups, nail polish remover, spoon, small square of clean cloth for straining, hair dryer (optional) lacquer thinner.				
Shopping/Planning List	**For next week:** No items needed next week.				

Other Notes

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Day 1

What's Science All About | pp. 114–115

Activity Sheet Questions | #1–2

Day 2

What's Science All About | pp. 116–117

Activity Sheet Questions | #3

Day 3

What's Science All About | pp. 118–119

Activity Sheet Questions | #4–5

Optional: Do Together | Electrolysis

Take what your children learned about electrolysis today one step further. Since you probably do not want to try electrolysis by yourself at home, go to www.youtube.com to find a video about electrolysis. Visit our IG links page for a video we think your children will particularly enjoy 💻.

Did they realize that electrolysis of water could be used to break down water into hydrogen and oxygen atoms, thereby providing the basic building blocks of a possible alternative fuel? How might these elements (and their potential energy) be converted or otherwise used as a power source? Do they think they might someday drive a hydrogen-powered vehicle? Why or why not? What might the benefits be? Are there any particular drawbacks?

Use this time to discuss the importance of developing alternative sources of energy. What, if any, alternative energy sources can be found near your home? Are any of them being utilized today? If so, which ones?

Day 4

Chemically Active | Chapter 7 pp. 124–128 ■

Week 3 Activity Sheets

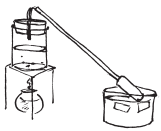
What's Science All About?

1. Describe a method you might use to separate a mixture of… (pp. 114–115)

… gravel and water: *(let the water stand and allow the gravel to sink to the bottom—or use a strainer to strain off the water)*

… iron filings and baby powder: *(use a magnet to pull out the iron filings)*

… salt and water: *(distill it: boil the mixture—the water will evaporate away from the salt)*



2. Why is it possible to separate substances in a mixture? (p. 114–115)

(because the properties of substances in a mixture stay the same after they have been mixed, so you can use their properties to help you separate them)

3. Briefly describe each separation technique. (pp. 115–117)

Distillation: *(purifying substances using boiling points: since different substances boil at different temperatures, chemists can boil a solution and capture and cool the gas as it condenses again to separate substances)*

(Paper) Chromatography: *(a solvent is absorbed along the length of a piece of paper. Some solutes spread farther apart than others depending on how strongly they stick to the paper)*

Centrifugation: *(Chemists will place solutions of substances with different densities in tubes and then into a centrifuge. The centrifuge spins around really fast which forces the densest solutes toward the bottom of the tube.)*

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Week 3 Activity Sheets

4. How does a chemical reaction differ from a mixture? (pp. 105, 114–118)

Chemical Reaction	Mixture
(bonds between atoms are broken and rearranged to form new compounds; chemical compounds have different properties from those of the elements they contain)	*(components are still separable; components still have the same properties as they did when they were separate)*

5. Briefly describe the electrolysis process. (p. 118) *(a compound is melted or dissolved in a solvent to make an electrolyte. Then, chemists pass an electric current through it, causing the compound to break apart)*

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Week 3 Activity Sheets

What's Science All About?

1. Describe a method you might use to separate a mixture of… (pp. 114–115)

   … gravel and water: _____

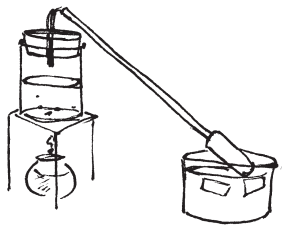
   _____

   … iron filings and baby powder: _____

   _____

   … salt and water: _____

   _____



2. Why is it possible to separate substances in a mixture? (p. 114–115)

   _____

   _____

3. Briefly describe each separation technique. (pp. 115–117)

   Distillation: _____

   _____

   _____

   (Paper) Chromatography: _____

   _____

   _____

   Centrifugation: _____

   _____

   _____

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4. How does a chemical reaction differ from a mixture? (pp. 105, 114–118)

Chemical Reaction	Mixture

5. Briefly describe the electrolysis process. (p. 118) _____

_____

_____

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Science 6—Weekly Subject List

Week	Subject
1	introduction to chemistry/applied chemistry (inventions)/atoms/chemical reactions/compounds/mixtures/ elements
2	states (solid, liquid, gas)/temperature/changing states/molecules/air pressure/physical properties/chemical properties/substances/displacement
3	filtration/distillation/chromatography/centrifugation/electrolysis/chromatography
4	atoms/nucleus/protons/neutrons/electrons/substances/compounds/periodic table/elements/metals/ metalloids/non-metals/periodic table
5	pure elements/compound elements/nucleus shells/bonding (ionic, covalent)/ ionic compounds/ covalent compounds/crystals
6	nuclear reactions/radiation/history of atoms/reactions/by-products/endothermic/exothermic/isotopes
7	activation energy/reactivity/catalysts/inhibitors/equations/law of conservation of mass/displacement reaction/decomposition/reversible reactions/chemical bonds/formulas
8	oxidation/reduction/combustion/acid/base/corrosion/alkali/salts/pH scale/indicators/soap/matter/mass
9	plastics/carbon chemistry/DNA/metals/solutions/molecules/distillation
10	reactivity series/gases/non-metals/mass spectrometer/crystallization
11	substance identification/origins of elements/geology/rock cycle/atmosphere/greenhouse effect/ living chemistry (medicines)
12	body chemistry/chemistry history timeline/physics/physicists/energy/space/applied physics (inventions)/ origins of the universe/Big Bang/atoms/molecules/elements
13	electrons/neutrons/protons/quarks/gluons/speed and motion/mass/momentum/force/friction/ chemical reactions/combustion
14	Newton's Laws/inertia/machines/gravity/air resistance/terminal velocity/centripedal force/centrifugal force/gases
15	center of gravity/pressure/density/volume/displacement/precipitate
16	energy/energy transfer/fossil fuels/global warming/alternative power sources (wind, water, solar, nuclear)/solids/ liquids/gases/evaporation/condensation/temperature/expansion/contraction/thermometers/conduction/ convection/radiation/insulation
17	waves/wavelength/oscillation/electromagnetic spectrum/light physics/rainbows/solar spectrum/reflection/ light scattering/matter/Law of Definite Proportions
18	refraction/lenses/sound energy/frequency/sound waves/echoes/sonar/sound and light/electricity/currents/ electrical solutions/electrolytes
19	batteries/circuits/currents/circuit diagram/magnets
20	magnetism/magnetic fields/electromagnetism/electromagnets/space/astrophysics/stars/sun/moon/eclipse/ solar system/physics timeline/acids and bases
21	introduction to biology/living things (commonalities)/classification/vertebrates/invertebrates/plants/ electrolytes/ structure of atoms
22	cells/organs/viruses/bacteria/protists/microbes/medicines/electroplating
23	human body/skeletal system/muscles/brain/nervous system/senses/digestive system/respiratory system/ circulatory system
24	reproductive system/genes/animal biology/botany/photosynthesis/photosynthesis

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Science 6—Weekly Subject List (cont.)

Week	Subject
25	plant biology/ ecology/ habitat/environment/population/ecosystems/keystone species/food chain/carnivores/ herbivores/omnivores/ pollution/climate change/biology timeline
26	earth/maps/seasons/rocks/minerals/fossils/Earth's resources/Earth's energy
27	volcanoes/natural hot water/earthquakes/earthquake safety
28	tsunamis/carbohydrates/ atmosphere/air and ocean currents/natural cycles/climate change/world climates/ rainforests/analysis/tropical grasslands
29	monsoons/deserts/Mediterranean climates/temperate climates/polar regions/mountains/changing climates
30	weather/analysis/water and clouds/thunderstorms/windstorms/photochemistry/floods/droughts/cold/heat/ strange weather/forecasting
31	plant/ecosystems/population/farming/farming methods
32	soil/weathering/erosion/analysis/rivers/river erosion/ground water
33	glaciers/coasts/seas and oceans/maps/scientific method/experiments/hypothesis/formulas/chemical equations/ atoms/science terms/reference information/analysis
34	Gregor Mendel/pollination/genotype and phenotype/alleles/heterozygous vs. homozygous/dominant vs. recessive traits/Punnett squares/cells/mitosis/
35	DNA/chromosomes/genes/genomes/meiosis/
36	sex-linked traits/trait inheritance/probability/RNA/translation/mutations/DNA fingerprinting/gene therapy/ cloning/ethics

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