“Today we’ll tackle chocolate chip cookies,” Chef Orlando said.

The food science class broke into applause. Chef Orlando took a bow and lifted his giant wooden spoon with a smile.

“Okay, class, first we measure out the flour, baking soda, and salt. Then we sift them all together,” he said.

“Next, in a different bowl, combine the wet ingredients. Cream the butter and sugar on medium speed, and then add the eggs and vanilla.”

Giggles erupted as one student lifted his mixer at an odd angle and a blob of slimy dough flew across the room.

“Now you can add the sifted flour and mix. Last but not least, go ahead and pour in the chocolate chips!”

Chef Orlando nodded his approval at the bowls of cookie dough. “Perfect. Before we started mixing ingredients, I preheated the ovens, so now we just spoon lumps onto the cookie sheets and bake for eleven minutes,” Chef Orlando said.

---

**Event 1:**

**Event 2:**

**Event 3:**

**Event 4:**

**Event 5:**

**Event 6:**
Read the selection below.

Summer Harvest

“Welcome back. I’m so glad you decided to join me for the Summer Harvest class,” Mrs. Green said. “As you remember, we planted many crops in April. Since then, we weeded in May and did pest control in June. A garden has to survive many challenges: bugs, severe weather, and proper soil conditioning. So far, our garden seems to have made it through.”

“Which vegetables will be ready to harvest first?” asked Jill.

Mrs. Green exclaimed, “Beans! Bush beans, green beans, pole beans, you name it. These plants grow in just 60 days.” The class harvested the beans and consumed bean salad, refried beans, and bean dip until they didn’t want to see another bean.

A few weeks later, Jill asked, “What crop will be mature and ready for harvesting next?”

“Corn and cucumbers. These plants take a little more care and time to develop than the beans,” Mrs. Green said. They pulled the corn from the stalks and plucked the cucumbers from their plants.

After a couple of weeks, the gardeners were ready for the next harvest. Mrs. Green announced, “Guess what, class? The final harvest is our crops of tomatoes and peppers. They are ripe and waiting for you to pick and savor them!”

“Our garden is a huge success!” exclaimed Jill.

Complete a Flow Chart to organize selection details in sequence. Then answer the questions below.

1. What was the first step in the Summer Harvest class’s successful garden?

2. What can you predict about next year’s garden planting?

Name ___________________ Date ___________
Latin Roots and Affixes

Some of the words below are formed using one of the following root words: lumen/luc/lum, which means “light,” and mov/mot/mobil, which means “move.” The other words use one of the following prefixes:ambi-, meaning “both” or “around,” and sub-, meaning “under.” Choose the word from the box that best completes each sentence.

ambitious translucent ambivalent motivated promotion subterranean luminous submarine

1. I was feeling _____________, when I couldn’t decide between chocolate and vanilla ice cream.

2. An earthworm is a _____________ animal, since it lives underground.

3. I could see right through the _____________ screen.

4. The _____________ student took several difficult classes.

5. The stars shining brightly in the sky look _____________.

6. I got up early on Saturday morning because I was _____________ to be the first person in line when the store opened.

7. Under the water, the dolphin swam by the large _____________.

8. My mom got a _____________ at work, and she said it would help her move up in her career.
Final /ən/, /əl/, and /ər/

Basic Write the Basic Word that best belongs in each group.

1. trash, garbage, _______________
2. pint, liter, _______________
3. fields, trees, _______________
4. circle, square, _______________
5. leave, give up, _______________
6. advice, help, _______________
7. incorrect, wrong, _______________
8. enemy, competitor, _______________
9. flower, seed, _______________
10. tuna, bass, _______________
11. end, stop, _______________
12. reduce, reuse, _______________
13. breathe, air, _______________
14. car, truck, _______________
15. watch, observe, _______________

Challenge Imagine you are running a marathon. Write a paragraph telling about the event. Use three of the Challenge Words. Write on a separate sheet of paper.

Challenge Words:

1. triangle
2. mental
3. error
4. panel
5. litter
6. pollen
7. gallon
8. cancel
9. abandon
10. rival
11. soldier
12. recycle
13. salmon
14. counsel
15. rural
16. vehicle
17. citizen
18. monitor
19. physical
20. oxygen

Spelling Words:

1. punctual
2. endeavor
3. abdomen
4. kilometer
5. dandelion

Name __________________________  Date ___________
## Spelling Word Sort

Write each Basic Word beside the correct heading.

<table>
<thead>
<tr>
<th>Final /en/</th>
<th>Final /el/</th>
<th>Final /er/</th>
</tr>
</thead>
<tbody>
<tr>
<td>spelled en and on</td>
<td>spelled ie, el, and al</td>
<td>spelled or and er</td>
</tr>
</tbody>
</table>

**Challenge** Add the Challenge Words to your Word Sort.

**Connect to Reading** Look through “Science Friction.” Find words in this selection that have the final /en/, /el/, and /er/ spelling patterns on this page. Add them to your Word Sort.

*Science Friction*

**Spelling:** Final /en/, /el/, and /er/

1. triangle
2. mental
3. error
4. panel
5. litter
6. pollen
7. gallon
8. cancel
9. abandon
10. rival
11. soldier
12. recycle
13. salmon
14. counsel
15. rural
16. vehicle
17. citizen
18. monitor
19. physical
20. oxygen

**Challenge**

punctual
endeavor
abdomen
kilometer
dandelion
Proofreading for Spelling

Find the misspelled words and circle them. Write them correctly on the lines below.

Concentrating all his mental powers, the lab student focused on his science experiment. Carefully, Leo brushed cactus pollen onto his left arm. Even though his teacher had tried to counsel him to abandon his mad project, he was determined to change his own physical properties. Next he mixed a gallon of his secret growth formula and drank it. He stepped into the pressure chamber and pressed the control button that would deliver the oxygen. He tried to monitor the process for error but grew dizzy. Still, nothing could make him cancel his dream. No bully would ever make fun of him again. No rival would win the coveted science fair prize. He stumbled out of the chamber. A giant, poison-spiked, green cactus arm extended where Leo Finkle’s left arm had once been.

1. ________________  7. ________________
2. ________________  8. ________________
3. ________________  9. ________________
4. ________________ 10. ________________
5. ________________ 11. ________________
6. ________________
Using *and*, *but*, and *or*

The **coordinating conjunctions** *and*, *but*, and *or* join sentence parts. *And* adds information. *Or* shows choice. *But* shows contrast.

We took a ride on the boat, **and** he showed us fish.
Mike can go swimming, **or** he can go fishing.
I was tired, **but** I finished the work.

**Activity** Underline the coordinating conjunction in each sentence.

1. We waited for you, but you were at a piano class.
2. You can eat the sandwiches, or you can hide them somewhere.
3. Science interests me, but I find it difficult.
4. We sat in my room, and we tried to decide who would be the leader.
5. I wanted to be the leader, but she wanted to make the decisions.
6. He ate a sandwich, and I went on working.
7. We could meet at your house, or we could meet at mine.
8. You like astronomy, but I prefer biology.
9. My room was a mess, and it was getting messier.
10. I was worried, but the project went well.

**Thinking Question**

Does the word join parts of a sentence? Does it add information, or does it show choice or contrast?
A **compound sentence** is made up of two simple sentences, joined by a comma and a connecting word such as *and*, *or*, or *but*.

Ellen talked a lot, but George was almost silent.

**Activity** Underline the simple sentences in each compound sentence. Circle the connecting word.

1. He took the turkey sandwich, but he didn’t eat it.
2. Do you like science best, or do you prefer math?
3. I worried, and Benji cheered me up.
4. We tried to work, but we all had different ideas.
5. Five weeks passed, and we still didn’t have a plan.
6. I didn’t like Ellen at first, but we became friends.
7. You could make the model, or you could draw the outline.
8. George was not completely silent, but he didn’t say much.
9. We finished the project, and our teacher liked it.
10. I could be a scientist, or I could be a clown.

**Thinking Question**

What are the two simple sentences joined by a connecting word?
Subject-Verb Agreement in Compound Sentences

Each subject in a compound sentence must agree in number with the verb that follows it.

My brother bikes to school, but my sisters drive.

Activity  Circle the correct form of the verb in the parentheses.

1. Mr. Wallace (teach, teaches) science, but they (teach, teaches) math.
2. Alison (run, runs) a mile each day, and I (walk, walks) in the park.
3. You (is, are) great at physics, and Juan (is, are) great at biology.
4. We (talk, talks) a lot at lunch, but Mr. Wallace (like, likes) silence.
5. The science project (take, takes) too much time, but I (like, likes) learning about snakes.
6. They (need, needs) a new team member, and I (wants, want) to join.
7. Jeanine (help, helps) me with math, but I (help, helps) her with science.
8. Five students (wants, want) to do a project on fossils, but Mari (prefer, prefers) a project on plants.
9. Kyle and Hina (is, are) science team captains, but Hina (want, wants) to meet every day.
10. The science fair (is, are) on Friday, and I (am, are) almost ready.

Thinking Question
Does each subject in the sentence agree in number with the verb that follows it?
Subjects and Predicates

<table>
<thead>
<tr>
<th>Imperative Sentence</th>
<th>(You) Please clean your room.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrogative Sentence</td>
<td>Will you clean up this bedroom?</td>
</tr>
<tr>
<td>Compound Subject</td>
<td>Dirty clothes and scattered toys clutter the floor.</td>
</tr>
<tr>
<td>Compound Predicate</td>
<td>I will fold my laundry and organize my closet.</td>
</tr>
</tbody>
</table>

1–3. Write imperative or interrogative for each sentence. Then write the subject of the sentence.

1. Please bring me the vacuum. ________________
2. Should we find an extension cord? ________________
3. Sweep the hallway first. ________________

4–8. Underline the conjunction in each compound subject or predicate. Then write the simple subjects or simple predicates that are joined by the conjunction.

4. Dust and dirt are swept into the pan. ________________
5. Would you rather clean the closet or wash the windows? ________________
6. I emptied the wastebasket and closed the dresser drawers. ________________
7. Jackson and Felicia said that my room looked as if a tornado had gone through it ________________
8. I clean my room every week and help around the house with other chores. ________________
Sentence Fluency

Rambling, Choppy Sentences
We could do an astronomy project. Only Ellen knows about astronomy. George doesn’t say much. Benji isn’t much help either.

Compound Sentences
We could do an astronomy project, but only Ellen knows about astronomy. George doesn’t say much, and Benji isn’t much help either.

Combine the simple sentences into compound sentences. Write the new sentence on the line.

1. We could study fish. We could grow beans.
   ________________________________________________

2. Maybe George was smart. It was hard to tell.
   ________________________________________________

3. We couldn’t work together. Our project was behind schedule.
   ________________________________________________

4. Our moldy food seemed like a mess. It got us an A!
   ________________________________________________

5. Ellen had many interests. She enjoyed astronomy and music the most.
   ________________________________________________
Focus Trait: Ideas
Expressing an Opinion

Good writers give detailed explanations for their opinions. They also use evidence to support their opinion.

When explaining your opinion in a response to literature, be sure that you use details and examples from the text to support your opinion.

Read the book review below. Then answer the questions that follow.

The new book by acclaimed author Spooky van Danz, entitled *A Very Spooky Tale of Mad Science*, is an excellent follow-up to his debut novel, *A Spooky Tale of Mad Science*. In this thrilling sequel, the author brings back the hero, Dr. Al Chemy, who once again wreaks havoc by setting loose wacky monsters created in his secret lab. The author’s unique blend of humor and terror make for an exciting read. For example, in Chapter 5, Dr. Al Chemy’s latest creation, a giant apple-monster with an appetite for doctors, causes chaos at a local hospital. Aside from Chapter 2, which went on a bit too long describing Dr. Al Chemy’s brother Joe, the book was an entertaining page-turner. I would highly recommend it.

1. What word in the topic sentence establishes the writer’s opinion about the book?

2. What sentence shows the writer using textual evidence to back up her opinion?

3. What reason does the writer give for liking the book?

4. What part of the book did the writer not like? What reason is given?