The Machines That Found the Titanic

At ship Titanic sank in 1912. For over 70 years, researchers believed its wreck was on the ocean floor. An explorer and oceanographer named Ballard decided to search for the Titanic. He used special machines that helped him find a lost ship.

This machine was one that Mr. Ballard invented. It was called Argo. It was like a big sled. It was towed behind Dr. Ballard’s ship. It uses sonar to find objects on the ocean floor by bouncing sound off of it. The waves bounce off of a shape, and the sonar measures the time it takes for the waves to return from the ocean floor.

On September 1, 1985, Argo found something big in the water. It was a boiler from the engine of the Titanic. The great ship was found! It was 12,000 feet (3,657.6 m) under the ocean floor. The crew members 2.5 hours just to go that deep into the ocean floor. It has special lights to help the Argo find the boiler from the engine of the Titanic.

Another special machine used to help explore the Titanic is called Jason Junior. The crew called it “JJ” for short. It’s a small, floating robot on a leash, linked to Alvin in a 120-foot (36.6 m) cable. JJ rides inside Alvin. When Dr. Ballard wants to explore, JJ can explore on its own. JJ floats up ahead of the boat. Ballard and other crew members can move JJ to move to any area they want. The robot can search underwater for the ship’s boiler. It can even explore in places where the robot is too deep for humans to go.

The boiler was found on the ocean floor. It was in the water for over 70 years. It was found by the robot. The robot was able to find the boiler and send back pictures. Then the crew members could see if the boiler was from the Titanic.

Answer the questions.

1. What is an antonym for special?
   A. interesting
   B. unusual
   C. ordinary
   D. different

2. How did the explorers first know they had found the Titanic?
   A. Alvin sent them pictures of the ship.
   B. They went to the floor of the sea and saw the wreck.
   C. They had a map that showed them where the ship was.
   D. Argo sent them pictures of part of the Titanic’s engine.

3. Describe Argo. Write your answer in complete sentences.

4. Why did the explorers need JJ?
   A. It was not safe for them to dive and go into the Titanic themselves.
   B. JJ was smart enough to find the boiler.
   C. They wanted to see inside the ship, and JJ had cameras to take pictures.
   D. All of the above

5. Why do you think Alvin could not go inside the Titanic?
   A. Alvin was too big.
   B. Alvin could not go up and down.
   C. Alvin was too small.
   D. Alvin would not fit inside.

6. Which of the following is an opinion?
   A. Argo uses both types of sonar.
   B. The Titanic was 12,000 feet (3,657.6 m) under the ocean floor.
   C. The Titanic was a big ship.
   D. The Titanic was a special ship for its time.
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Introduction

Providing all students access to high quality, nonfiction text is essential to Common Core State Standards mastery. This book contains exactly what teachers are looking for: high-interest nonfiction passages, each written at three different reading levels, followed by a shared set of text-dependent comprehension questions and a writing prompt to build content knowledge. Both general academic and domain-specific vocabulary words are reinforced at the end of each passage for further comprehension support. The standards listed on each page provide an easy reference tool for lesson planning and the Common Core Alignment chart on page 3 allows you to target or remediate specific skills.

The book is comprised of 15 stories that are written at three levels:

- Below level (one dot beside the page number): 1 to 1.5 levels below grade level
- On level (two dots beside the page number): 0 to .5 levels below grade level
- Advanced (three dots beside the page number): 1 to 2 levels above grade level

Which students will not enjoy reading about a 200-pound (90.71 kg) lizard or the mysterious Loch Ness Monster or how Anne Frank hid for two years behind a bookcase? This will quickly become the go-to resource for differentiated nonfiction reading practice in your classroom!
# How to Use This Alignment Chart

The Common Core State Standards for English Language Arts are a shared set of expectations for each grade level in the areas of reading, writing, speaking, listening, and language. They define what students should understand and be able to do. This chart presents the standards that are covered in this book.

Use this chart to plan your instruction, practice, or remediation of a specific standard. To do this, first choose your targeted standard; then, find the pages listed on the chart that correlate to the standard you are teaching. Finally, assign the reading pages and follow-up questions to practice the skill.

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Brilliant Bait

Have you ever seen a **clown fish**? You probably have. The clown fish has bright stripes and colors just like a clown. That is probably where it got its name. There are many different patterns and colors on the bodies of clown fish. The most common is orange with white and black stripes.

A real clown fish is not funny. The clown fish is a fish to be feared. It protects its home and its eggs with care. The female clown fish lays between 300 and 700 eggs at one time. But, the male clown fish takes care of the eggs. He watches them until they hatch. One strange thing about clown fish is that they can change gender. If a female dies or is killed, the male can change into a female in a few weeks. Then, it mates with a male and keeps laying eggs.

The clown fish has a strange home. It lives in the **tentacles**, or arms, of a sea animal called an **anemone**. These two animals have made a deal with each other. The anemone doesn’t eat the clown fish and provides a safe home. In return, the clown fish does three things for the anemone. It cleans the anemone’s tentacles, eating leftover bits of food. It guards the anemone against some enemies. And, it acts as bait. The clown fish’s bright stripes draw other fish to the deadly tentacles. The anemone stings these fish and eats them. The “friendship” between these two sea animals works very well for both of them.

Where in the world does the clown fish live? It can be found in the seas near India, Indonesia, and Australia. Each bright, strong little fish always lives with the same sea anemone, never leaving its side.

**clown fish**: a small tropical fish that is bright orange, usually with one or more white stripes

**tentacles**: arms that usually lead from the head or around the mouth of animals

**anemone**: a sea animal whose body is surrounded by petal-like tentacles
Have you ever seen a *clown fish*? You probably have. The clown fish has bright stripes and colors just like a clown. That is probably where it got its name. There are many different patterns and colors on the bodies of clown fish. The most common is orange with white and black stripes.

A real clown fish is not funny. The clown fish is a fierce fish, a fish to be feared. It protects its home and its eggs with care. The female clown fish lays between 300 and 700 eggs at one time. But, the male clown fish takes care of the eggs. He watches them until they hatch. One strange thing about clown fish is that they can change gender. If a female dies or is killed, the male can change into a female in a few weeks. Then, it mates with a male and keeps laying eggs.

The clown fish has a strange home. It lives in the *tentacles*, or arms, of a sea animal called an *anemone*. These two animals have made a deal with each other. The anemone doesn’t eat the clown fish and provides a safe home. In return, the clown fish does three things for the anemone. It cleans the anemone’s tentacles, eating leftover bits of food. It guards the anemone against some enemies. And, it acts as bait. The clown fish’s bright stripes draw other fish to the deadly tentacles. The anemone stings these fish and eats them. The “friendship” between these two sea animals works very well for both of them.

Where in the world does the clown fish live? It can be found in the seas near India, Indonesia, and Australia. Each bright, strong little fish always lives with the same sea anemone, never leaving its side.

**clown fish**: a small tropical fish that is bright orange, usually with one or more white stripes

**tentacles**: arms that usually lead from the head or around the mouth of animals, especially invertebrates

**anemone**: a sea animal whose body is surrounded by petal-like tentacles
Have you ever seen a **clown fish**? You probably have and recognize it as Nemo from the movie called *Finding Nemo*. This interesting and colorful fish is also known as the clown anemonefish. Its **genus name** is *Amphiprion*. The clown fish has wide, bright stripes and distinctive colors that resemble the costume of a clown. That is probably where it got its name. There are many different patterns and colors on the bodies of clown fish. The most common coloration is orange with white and black stripes.

A real clown fish is not amusing like its namesake. The clown fish is a fierce and **vigilant** fish. It protects its home and its eggs with great care. The female clown fish lays between 300 and 700 eggs at one time. But, the male clown fish takes care of the eggs. He watches them until they hatch. One strange and interesting thing about clown fish is that they can change gender. If a female dies or is killed, the male can change into a female in a few weeks. Then, it mates with a male and keeps laying eggs.

The clown fish has an unusual home. It lives in the tentacles, or arms, of a multicolored sea animal called an **anemone**. These two animals have struck a deal with each other in order to accommodate each other’s needs. The anemone doesn’t eat the clown fish and provides protection and a safe home. In return, the clown fish does three things for the anemone. It cleans the anemone’s tentacles, eating whatever leftover bits of food lodge there. It also guards the anemone against its predators. And lastly, it acts as bait. The clown fish’s bright stripes draw other fish to the deadly tentacles of the anemone. The anemone stings these fish and eats them. The odd and unlikely “friendship” between these two sea animals benefits them both.

Where in the world does the clown fish live? It can be found in the seas near India, Indonesia, and Australia. Each bright, strong little fish always lives with the same sea anemone, never leaving its side. They are partners for life.

**clown fish**: a small tropical fish that is bright orange usually with one or more white stripes

**genus name**: labels a class, kind, or group with common characteristics

**vigilant**: alert, particularly to avoid danger

**anemone**: a sea animal whose body is surrounded by petal-like tentacles
Answer the questions.

1. How many eggs can a female clown fish lay at one time? Write your answer in a complete sentence.

_________________________________________________________________________________
_________________________________________________________________________________

2. Choose the word that best completes this sentence:
   Another word for tentacles is _______.
   A. spurs  B. hands  C. arms  D. eyes

Write T for true or F for false.

3. _____ The clown fish can change gender.
4. _____ A female clown fish lays 5,000 eggs at a time.
5. _____ Anemones kill clown fish for food.
6. _____ The anemone uses its tentacles to sting fish.
7. _____ All clown fish are orange with white and black stripes.
8. Which of the following does not describe the clown fish?
   A. brightly colored  B. timid  C. funny  D. B. and C.

9. Finish the sentences to list the three things that a clown fish does for a sea anemone.
   A. It cleans the anemone’s ____________________________________________.
   B. It guards the anemone against ________________________________________.
   C. It acts as ____________________________ to attract food for the anemone.

10. How did the clown fish probably get its name? Write your answer in a complete sentence.

_________________________________________________________________________________
_________________________________________________________________________________

11. What is the main idea of this story? What details help you answer this question?

_________________________________________________________________________________
_________________________________________________________________________________

12. Imagine you are deep underwater looking at the bottom of the ocean. On a separate sheet of paper, describe what you might see.
Page 7
1. A female clown fish lays 300 to 700 eggs at one time. 2. C; 3. T; 4. F; 5. F; 6. T; 7. F; 8. D; 9. A. tentacles; B. some enemies; C. bait; 10. The clown fish has bright colors and stripes like a clown. 11. Answers will vary but should include information to explain the main idea of the story. 12. Answers will vary.

Page 11
1. B; 2. C; 3. C; 4. No one ever saw them perch. 5. Answers will vary but may include: minute, tiny, smallest bird in the world, pea-sized eggs, nest is only about two inches (5.08 cm) wide; 6. D; 7. fast wings, pea-sized eggs, split tongue; 8. Answers will vary but should be in simile or metaphor form. 9. Answers will vary but should include details from the story. 10. Answers will vary but should come from multiple sources.

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Page 23
1. D; 2. D; 3. Answers will vary but may include: huge, giant, dark, as big as a bus, can swim like a seal, looks like a dinosaur (small head, long neck) 4. model, toy submarine; 5. C; 6. B; 7. Answers will vary. 8. Answers will vary. 9. Answers will vary.

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Page 31
1. B; 2. D; 3. A; 4. A; 5. the White Knight; 6. space station; 7. a special type of gas; 8. Answers will vary. 9. Answers will vary but must correlate to answers in question 8. 10. Answers will vary but need to be typed and shared.

Page 35
1. C; 2. D; 3. Answers will vary but may include: Argo is like a big underwater sled. Argo uses sonar to look at the ocean floor and cameras. 4. D; 5. A; 6. C; 7. D; 8. Answers will vary but should incorporate additional research and include an illustration.

Page 39
1. D; 2. Answers will vary but may include: Anne and her family had to hide from the Nazis because they were Jews. 3. A; 4. F; 5. T; 6. F; 7. T; 8. T; 9. Answers will vary but should provide a correct chronology. 10. Answers will vary but should include linking words.

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Page 47
1. A patent is a notice from the government. It says that someone owns an idea, and it is protected so that others cannot copy it. 2. C; 3. F; 4. F; 5. T; 6. F; 7. T; 8. D; 9. C; 10. D; 11. Edison worked to bring lighting to homes, streets, and stores. 12. Answers will vary but must include transitional words.

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Page 55
1. D; 2. C; 3. A; 4. fiver; 5. Colorado; 6. six million; 7. one mile (1.6 km); 8. A; 9. The Grand Canyon has five different life zones because it is so large and deep. The different elevations have different climates, or kinds of weather, and different amounts of water. 10. Answers will vary. Check for correct punctuation, spelling, and capitalization.

Page 59
1. Tides; 2. Wolfville; 3. a few feet (a meter); 4. 45, (13.72); 5. D; 6. B; 7. A; 8. Answers will vary. 9. The tide is out. You might also see people and birds. 10. Answers will vary but must include an introduction and conclusion.

Page 63
1. B; 2. B; 3. Answers will vary but may include: when they were built, how they were built, how long it took to build them; 4. C; 5. C; 6. Answers will vary. 7. Student will read the passage aloud at least twice. 8. Answers will vary but should include the student’s opinion and reasons.