#### Question 1-11 are based on the following passage.

#### The Rocket Scientist behind the Super Soaker

It is not generally advisable to spout a stream of water across a boardroom filled with executives. However, Lonnie Johnson—NASA engineer, inventor, and creator of the Super Soaker—delighted the president of toy company Larami Corp. with this very display. In 1989, after a seven-year trudge through failed patents and rejections, Johnson finally got his Super Soaker to store 1 shelves where it reigned as the most popular water gun toy of the 1990s. His product and 2 it's spinoffs still predominate that market today. A combination of luck and perseverance contributed to Johnson's successful creation.

- A) NO CHANGE
- B) shelves,
- C) shelves;
- D) shelves:

# 2

- A) NO CHANGE
- B) its
- C) its'

D) their



2

[1] The discovery that 3 ended up eventually leading Johnson to his first Super Soaker model was serendipitous. [2] At the time, Johnson's day job was at NASA's Jet Propulsion Laboratory, where he helped design an atomic battery for Galileo, a spacecraft created to observe Jupiter. [3] By night, Johnson explored his own inventions in his home office. [4] Johnson's prototype sported a long plastic tube and a metal spigot. [5] He aimed it at the bathtub, and the powerful torrent of water it yielded put him 4 at mind of a high-powered water gun. [6] The next step—an arduous one—was to find a company with the desire and means to produce it. [7]

## 3

- A) NO CHANGE
- B) was the thing that was instrumental in leading
- C) was what led
- D) led

# 4

- A) NO CHANGE
- B) of mind to
- C) in mind of
- D) to mind on





After expressing initial interest, Johnson was dismayed when one toy company ended negotiations. [8] The next company he approached went bankrupt. [9] He persisted and, after Johnson's interactive display in that boardroom, Larami Corp. bought the Super Soaker and created fourteen different models of water guns based on his design. [10] A decade later, over 200 million Super Soakers had sold, generating over \$400 million in revenue.

Johnson's physics and engineering skills were critical to his toy design. Traditional water guns are held in one hand and require just a trigger pull to eject the water from a small cavity. Johnson's invention, <u>8</u> by <u>contrast</u>, calls for more muscle, requiring two hands to operate an air pump before discharging, and stores water in a larger container. The pump action on the Super Soaker allows the user to compress the water and store more energy, resulting in a mighty cascade of water.

## 5

## A) NO CHANGE

- B) After expressing initial interest, it was a dismay to Johnson when one company ended negotiations.
- C) Johnson was dismayed when, after expressing initial interest, negotiations ended with one company.
- D) Johnson was dismayed when one company ended negotiations after expressing initial interest.

#### 6

The writer wants to add the following sentence to the second paragraph.

He was attempting to create a water-based cooling device that would eliminate the need for the toxic compound Freon.

The best placement for the sentence is after

- A) sentence 1.
- B) sentence 3.
- C) sentence 4.
- D) sentence 5.

#### 7

At this point, the writer is considering adding the following sentence.

After building the Super Soaker, Johnson invested significant time and energy researching solar cells.

Should the writer make this addition here?

- A) Yes, because it effectively establishes the main topic of the paragraph.
- B) Yes, because it provides a smooth transition between the second and third paragraphs.
- C) No, because the information is redundant with information provided earlier in the passage.
- D) No, because the information is irrelevant to the main topic of the paragraph.

### 8

- A) NO CHANGE
- B) additionally,
- C) further,
- D) similarly,



While he enjoyed the accomplishment of creating this product, Johnson also sought to solve problems more complex than 9 amending summer fun. He embarked on his own 10 business. He founded Johnson Research and Development with his Super Soaker proceeds. He owns over 80 patents, and his main goal is to create more viable options for renewable energy. Johnson's 11 persistence knowledge and a happy accident paved the way for his success as an independent inventor.

# 9

- A) NO CHANGE
- B) optimizing
- C) modifying
- D) tweaking

# 10

Which choice most effectively combines the sentences at the underlined portion?

- A) business; that is, he founded
- B) business, but he founded
- C) business, which was the founding of
- D) business, founding
- 11

# A) NO CHANGE

- B) persistence knowledge, and a happy accident
- C) persistence, knowledge, and a happy accident
- D) persistence, knowledge, and a happy accident,

