Standards-based Activities
(3rd-5th Grades)

1. Reading
2. Writing
3. Math
4. Answers

Note: These activities can stand alone or be used in conjunction with “Survival Florida” at the Museum of Florida History. For more information call the education staff at 850-245-6400.

Designed by the Museum of Florida History
Special thanks to Edsolve Education Consultants and Pelotes Island Nature Preserve (http://pelotes.jea.com), which were used as resources for these standards-based activities.

STANDARDS-BASED READING QUESTIONS

Vocabulary

Bellows: An instrument used to produce a strong current of air to increase the flames of a fire

Crossbow: A weapon with a bow attached crosswise to a wooden stock

Pitch: A dark, sticky substance made from trees and other sources to waterproof an object

Ballast: Heavy objects, such as rocks, placed in the bottom of a boat or ship to keep it balanced.

The following is the true story of the Spanish explorer, Alvar Núñez Cabeza de Vaca. He was one of only four survivors of the ill-fated expedition to Florida led by Pámfilo de Narváez. De Vaca wandered through the wilderness of North America from 1528 to 1534 before he found his way back to Mexico City. Upon his return, he wrote many tales concerning his adventures.

The expedition landed near Tampa Bay on April 15, 1528 to create a settlement. Foolishly, Narváez sent away his ships, which contained food and supplies. After months of walking through hostile territory, the expedition reached the coastal region of Aute, south of present-day Tallahassee. Many of the men were sick, and their food supplies were gone. The expedition wanted to make rafts to float along the coast to Mexico, but no one knew how to build them. In this story, de Vaca tells how the explorers solved their problem.

". . . that next day one of our men [came] saying he could make wooden pipes and deerskin bellows . . . we bade him commence. We also instigated the making of nails, saws, axes, and other tools needed out of the stirrups, spurs, crossbows, and other of our equipment containing iron.

". . . while the work proceeded, we decided to make forays into Aute with every man and horse able to go, and to kill one of our horses every third day to divide among the workers and the sick. Our forays went off as planned. In spite of armed resistance, they netted as much as 400 *fanegas* [about 100 bushels] of corn.

-Continued on the Next Page-

Survival Florida

Standards-based Reading Questions Continued

"We had stacks of palmettos gathered, and their husks and fibers twisted and otherwise prepared as a substitute for oakum. A Greek, don Teodor, made pitch from certain pine resins. Even though we had only one carpenter, work proceeded so rapidly from August 4, when it began, that by September 20, five barges, each 22 elbow lengths [31–32 feet long], caulked with palmetto oakum and tarred with pitch, were finished.

"From palmetto husks, horsetails, and manes, we braided ropes and rigging. From our shirts we made sails; and from junipers, oars . . . only the most persistent search turned up stones large enough for ballast and anchors. Before this, we had not seen a stone in the whole region. We flayed the horses' legs, tanned the skin, and made leather water-bottles.

"Twice in this time, when some of our men went to the coves for shellfish, Indians ambushed them, killing ten men in plain sight of the camp before we could do anything about it. We found their bodies pierced all the way though, although some of them wore good armor . . .

". . . Before we embarked, we lost forty men from disease and hunger, in addition to those killed by Indians. By September 22 all but one of the horses had been consumed. That is the day we embarked [after eating the last horse] . . .

". . . When clothing and supplies were loaded, the sides of the barges remained hardly half a foot above water; and we were jammed in too tight to move. Such is the power of necessity that we should thus hazard a turbulent sea, none of us knowing anything about navigation."

Resources:

Michael Gannon. "First European Contacts" in *The New History of Florida*, Michael Gannon, ed. Gainesville: University Press of Florida, 1994, pp. 16–37.

Covey, Cyclone, trans. & ed. *Adventures in the Unknown Interior of America*. Albuquerque: University of New Mexico, 1961, pp. 45–47.

1. Where does this event take place?
    a. In Mexico City
    b. In Georgia, near present-day Atlanta
    c. Near Tampa Bay
    d. Along the coast near present-day Tallahassee

2. The article contains the sentence "We had stacks of palmettos gathered, and their husks and fibers twisted and otherwise prepared as a substitute for oakum." Think about the meaning of the word "oakum." Based on context clues, what is the meaning of the word "oakum" in this sentence?
    a. It was a type of food.
    b. It was something like rope.
    c. It was a type of weapon.
    d. It was something used as armor.

-Continued on the Next Page-

Survival Florida

Standards-based Reading Questions Continued

3. De Vaca states that the explorers made nails, saws, axes, and other tools out of stirrups, spurs, crossbows, and other equipment containing iron. Why do you think they would do this?
    a. They were building better weapons.
    b. They would use these new items to construct their rafts.
    c. They meant to trade the new items with the Indians.
    d. The old items weighed too much to take with them.

4. What does de Vaca mean when he says “Such is the power of necessity that we should thus hazard a turbulent sea, none of us knowing anything about navigation.”?
    a. They had no choice but to build rafts even though none of them knew anything about navigation.
    b. The Indians would chase them into the sea and catch them because they knew how to navigate.
    c. When they reached Mexico City, they would build better ships and buy new navigation equipment.
    d. They should not have killed the horses. It would have been better if they had stayed on land.

5. When reading stories, readers often become involved in the story and imagine sights, sounds, and smells in the character’s surroundings. Think of de Vaca and write a paragraph describing what he may have seen, smelled, or heard. Use details and information from the story to support your answer.

Read
Think
Explain

-Continued on the Next Page-

Survival Florida

Standards-based Reading Questions Continued

6. Consider the solution the Spanish explorers proposed in this situation and the ways your own solution might be similar or different. Do you think your way or the explorers' way is more logical? Use details and information from the article to support your answer.

Read
Think
Explain

Standards-Based Writing Prompts

1. Prehistoric Floridians had to protect themselves against dangerous animals, poisonous plants, and sometimes other tribes. Think about the different things that people have to protect themselves from today. Explain how modern dangers are similar to or different than those of prehistoric times.

2. When Spanish explorers came to Florida, they had limited supplies for survival. Think about what you would do if you were a soldier in charge of these supplies. Write to explain how you would make the supplies last longer.

3. Sometimes Florida's prehistoric people had to hunt large animals such as mastodons or mammoths. Think about how these people would have done this. Write a story about one of these hunts, which was surely an adventure.

4. Sometimes Spanish explorers were shipwrecked on the Florida coast and became lost in the wild. Think about what would happen if you were shipwrecked. Write a story about how you would survive and find your way back to civilization.

STANDARDS-BASED MATH QUESTIONS

1. Pretend you are a member of the Timucua tribe. One of your jobs is to help find food for your family of six. You are going to go to the river and collect snails for your family's afternoon meal. If your family eats 50 snails per person, and it takes you one hour to collect 100 snails, how many hours will it take you to get enough snails for a meal? Show your work.

a) 1 hour
b) 2 hours
c) 3 hours
d) 4 hours

-Continued on the Next Page-

2. The Timucua ate a variety of foods. Their diet consisted of

$^{3}/_{10}$ plants,
$^{1}/_{4}$ mussels and snails
$^{1}/_{4}$ white-tailed deer
$^{1}/_{5}$ other small animals

What is the total fraction for plants and other small animals in the Timucua's diet? Show your work.

a) $^{2}/_{3}$
b) $^{1}/_{2}$
c) $^{2}/_{5}$
d) $^{3}/_{5}$

Artifacts recovered from the Emanuel Point Shipwreck, 1993–1995

Artifact	1993	1994	1995
Aztec pottery shards	0	5	1
iron (fasteners etc.)	15	11	3
animal bone	64	326	31
insect remains	8	3	0
ballast	81	23	6

Source: The Emanuel Point Ship Archaeological Investigations, 1992–1995, Florida Department of State, 1999. 130–131.

3. Which of the following expressions accurately describes the number of artifacts collected in 1993 in the table entitled "Artifacts recovered from the Emanuel Point Ship, 1993–1995"?

a) ballast>animal bone>iron>insect remains>Aztec pottery shards
b) insect remains>Aztec pottery shards>iron>ballast>animal bone
c) ballast<Aztec pottery shards< insect remains<Iron<animal bone
d) animal bone<iron<Aztec pottery shards<insect remains<ballast

-Continued on the Next Page-

Survival Florida

Standards-based Math Questions Continued

4. Using the chart below, create a graph showing how many iron artifacts and insect remains were recovered for all three years from the “Artifacts recovered from the Emanuel Point Ship, 1993–1995” table. Be sure to label your graph, use appropriate scales, accurately graph the data, and label the axes.

Answers

Survival Florida

Reading

1. d.) LA.A.1.2.2, L.A.A.1.2.4, SS.A.1.2.2, SS.A.6.2.3, Bloom's taxonomy level one
2. b.) LA.A.1.2.2, LA.A.1.2.3, L.A.A.1.2.4, SS.A.1.2.2, Bloom's taxonomy level one
3. b.) LA.A.1.2.2, LA.A.1.2.4, LA.A.2.2.1, SS.A.1.2.2, Bloom's taxonomy level two
4. a.) LA.A.1.2.2, LA.A.1.2.4, LA.A.2.2.1, SS.A.1.2.2, Bloom's taxonomy level two
5. Use the rubric for short response questions–2 points
   LA.A.1.2.4, LA.A.2.2.4, LA.A.2.2.5, LA.B.1.2.2, LA.B.2.2.3, LA.B.2.2.5, LA.B.2.2.6, SS.A.1.2.2, Bloom's taxonomy level two

   Example of a top-score answer:

   De Vaca probably smelled things such as the sea and dead horses. He would have heard the shouts of the men when the Indians killed them. He would have felt the breeze from the sea and the hot sun.

6. Use the rubric for extended response questions–4 points.
   LA.A.1.2.4, LA.A.2.2.4, LA.A.2.2.5, LA.B.1.2.2, LA.B.2.2.3, LA.B.2.2.5, LA.B.2.2.6, SS.A.1.2.2, Bloom's taxonomy level two.

   Example of a top-score answer:

   I agree with the explorer's solution. Traveling by land would have taken a longer time. Because they did not have food, it was a good idea to eat their horses. They would not need their weapons and armor, so it was good that they made tools out of them. By staying on the sea, they would have avoided the Indians who were trying to kill them.

   Or

   The explorer's solution was not a good one. Because they melted their iron objects, they had no weapons to protect themselves. They should have ridden the horses instead of eating them. They should have stayed on land because they did not know how to navigate the sea. The rafts could break apart in the sea.

Writing

Use the rubric for "Florida Writes!"–6 points

1. LA.B.1.2.2, LA.B.2.2.3, LA.B.2.2.6
2. LA.B.1.2.2, LA.B.2.2.3, LA.B.2.2.6
3. LA.B.1.2.2, LA.B.2.2.3, LA.B.2.2.6
4. LA.B.1.2.2, LA.B.2.2.3, LA.B.2.2.6

Math

1. c) Use the rubric for short response math questions–2 points. MA.A.3.2.1, MA.3.2.2, MA.3.2.3

   Example of a top score answer:
   The answer is 3 hours
   1 person eats 50 snails, there are six people. 6x50=300
   It takes one hour to collect 100 snails. The family needs 300 snails.
   300/100=3

2. b) Use the rubric for short response math questions–2 points. MA.A.3.2.1, MA.3.2.2, MA.3.2.3

   Example of a top score answer:
   The answer is $^{1}/_{2}$
   Plants are $^{3}/_{10}$ of the diet, small animals are $^{1}/_{5}$
   $^{1}/_{5}=^{2}/_{10}$
   $^{3}/_{10}+^{2}/_{10}=^{5}/_{10}=^{1}/_{2}$

3. a) MA.A.1.2.2

4. MA.E.1.2.1

Example of a top score answer: