Fossil Butte Field Camp

Fossils and changing landscapes

Name: _____ Date: _____

Help the field crew use fossils and rock layers to learn how a place changed.

Keep your first answers. Ask your teacher for a hint. Then use the Try again space once.

Table 1: Field guide

Fossil	What it tells you
Fish fossils	Fish lived in water.
Plant roots in soil	These land plants grew in soil here.
Clam fossils	These freshwater clams lived in water.

1. Build a cliff model

Put each layer card in Figure 1. Use the age labels.

Nothing has flipped these flat layers. Older layers are below younger layers.

On paper, write each layer letter in a box.



Between the other two **Oldest** **Youngest**

Figure 1. Build a cliff model

First try	Try again
Top: _____	Top: _____
Middle: _____	Middle: _____
Bottom: _____	Bottom: _____

Teaching model - made up

Next: use a new cliff to find fossil clues on page 2.

PRACTICE 2 OF 3

2. Find the fossil clues

Use the first grid first. Keep it when you try again.

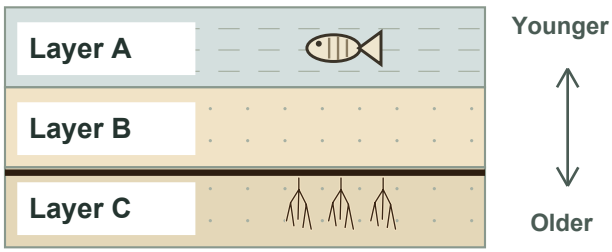
Name: _____ Date: _____

Use Figure 2 and Table 1, the field guide.

Table 1: Field guide

Fossil	What it tells you
Fish fossils	Fish lived in water.
Plant roots in soil	These land plants grew in soil here.
Clam fossils	These freshwater clams lived in water.

Figure 2. Fossil clues



Teaching model - made up

What fossil clue does each layer show?

Mark one choice in each row. A column may be used more than once.

Table 2. Layer clues

First try

Layer	Water animals	Land plants	No fossils shown
Layer A	○	○	○
Layer B	○	○	○
Layer C	○	○	○

Keep your first answers. Ask your teacher for a hint. Then use the Try again space once.

Try again - complete a new grid

Layer	Water animals	Land plants	No fossils shown
Layer A	○	○	○
Layer B	○	○	○
Layer C	○	○	○

3. Explain the change

Record your first choice letters, then your retry letters.

Name: _____ Date: _____

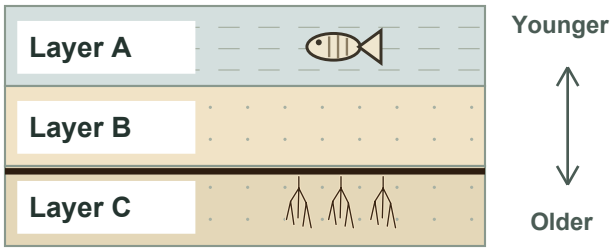
Use Figure 3. Read from older layers to younger layers.

Keep your first answers. Ask your teacher for a hint. Then use the Try again space once.

Table 1: Field guide

Fossil	What it tells you
Fish fossils	Fish lived in water.
Plant roots in soil	These land plants grew in soil here.
Clam fossils	These freshwater clams lived in water.

Figure 3. Practice cliff



Teaching model - made up

3a. Which claim does the cliff support?

- ○ A. This place changed from water to land.
- ○ B. This place stayed under water the whole time.
- ○ C. This place changed from land to water.
- ○ D. This place stayed on land the whole time.

First try: _____ Try again: _____

3b. Which two observations best support your answer to 3a?

Select two correct answers.

- ☐ A. Layer B has no fossils shown.
- ☐ B. Plant roots are in the older bottom layer.
- ☐ C. Fish fossils and roots are in the same layer.
- ☐ D. Fish fossils are in the younger top layer.
- ☐ E. Plant roots are above the fish fossils.

First try: _____ Try again: _____

Fossil Butte Field Camp

Exit question: a new cliff

Name: _____ Student code: _____

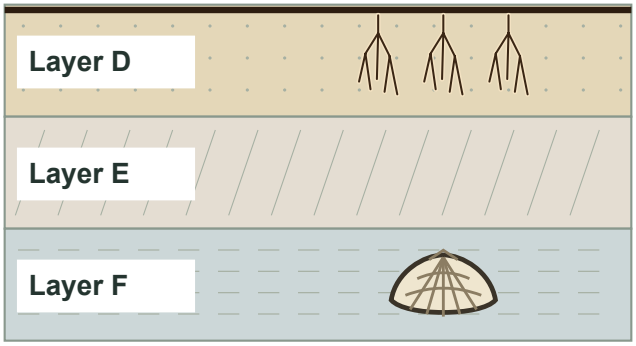
The crew finds the new cliff in Figure 4. Nothing has flipped these flat layers. Use the fossils and layers to explain the change.

Work on your own. Answer A, B and C. Use Figure 4 and Table 1. No hints or answer checks.

Table 1: Field guide

Fossil	What it tells you
Fish fossils	Fish lived in water.
Plant roots in soil	These land plants grew in soil here.
Clam fossils	These freshwater clams lived in water.

Figure 4. New cliff



Teaching model - made up

A. Find a fossil clue

Use Figure 4 to complete both blanks.

Layer _____ (1) is the oldest. It has _____ (2).

Menu 1: write one letter

A. D
B. E
C. F

Menu 2: write one letter

A. plant roots in soil
B. clam fossils
C. fish fossils
D. no fossils shown

B. Choose a claim

Which claim does the new cliff support?

- ○ A. This place stayed on land the whole time.
- ○ B. This place changed from water to land.
- ○ C. This place stayed under water the whole time.
- ○ D. This place changed from land to water.

C. Choose evidence

Which two observations best support your answer to Part B?

Select two correct answers.

- ☐ A. Layer F has clam fossils.
- ☐ B. Layer E has no fossils shown.
- ☐ C. Layer E has plant roots in soil.
- ☐ D. Layer D has clam fossils.
- ☐ E. Layer D has plant roots in soil.