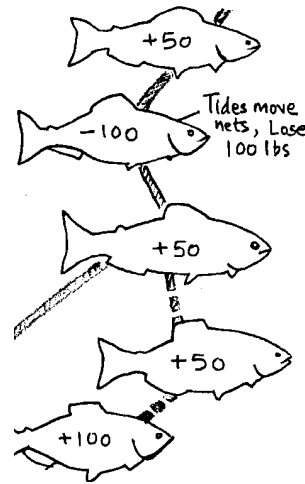


Fish Farmer

Key Concepts

1. Humans make choices based on economic decisions.
2. Humans culture marine animals and plants for food.



Background

The market place influences resource decisions in the marine realm. Aquaculturists are interested in making a return on their investment. This interest influences the choices they make. Additional background information for “Fish Farmer” is found in the activity “Sea Farming”.

Materials

For each pair of students:

- 1 set of “Fish Farmer” game board and cards
- 2 game markers (buttons, coins)
- scratch paper and pencils

Teaching Hints

“Fish Farmer” is a board game designed to help reinforce aquaculture concepts. The game is best played in groups of two. The game board and cards can be easily duplicated to obtain enough materials. The object of the game is to reach the finish first.

Directions

1. Stack the cards face down on the board. Playing order is determined by the toss of a die.
2. Player Two picks a card off the top and reads the problem and question to Player One.
3. Player One must work out the problem (on paper or “in head”) and respond with the answer.

4. Player Two verifies the answer. If the answer was correct, Player One may advance his marker forward on the game board the number of pounds of his answer. (i.e. if his answer was 100 pounds, Player One would move 100 pounds worth of fish on the board, perhaps two 50 pound fish. The value of the fish is listed inside the drawing of the fish on the game board.)
5. After Player Two has asked the question and Player One has responded, the roles are reversed and the game is continued until one player reaches the finish. That player is the winner.
6. Play the game again, only have Player One read the first card to Player Two.
7. Debrief the game in a class discussion with questions such as:
 - What kinds of hazards slowed your progress toward the finish?**
 - What types of decisions do fish farmers have to make?**
 - What kinds of things can happen if a fish farmer makes bad decisions?**

Key Words

culture - in this case, to grow something

current - a stream of moving water

economic - the production, distribution and use of commodities or income

net change - after deductions, the actual difference

net gain - after deductions, the actual profit

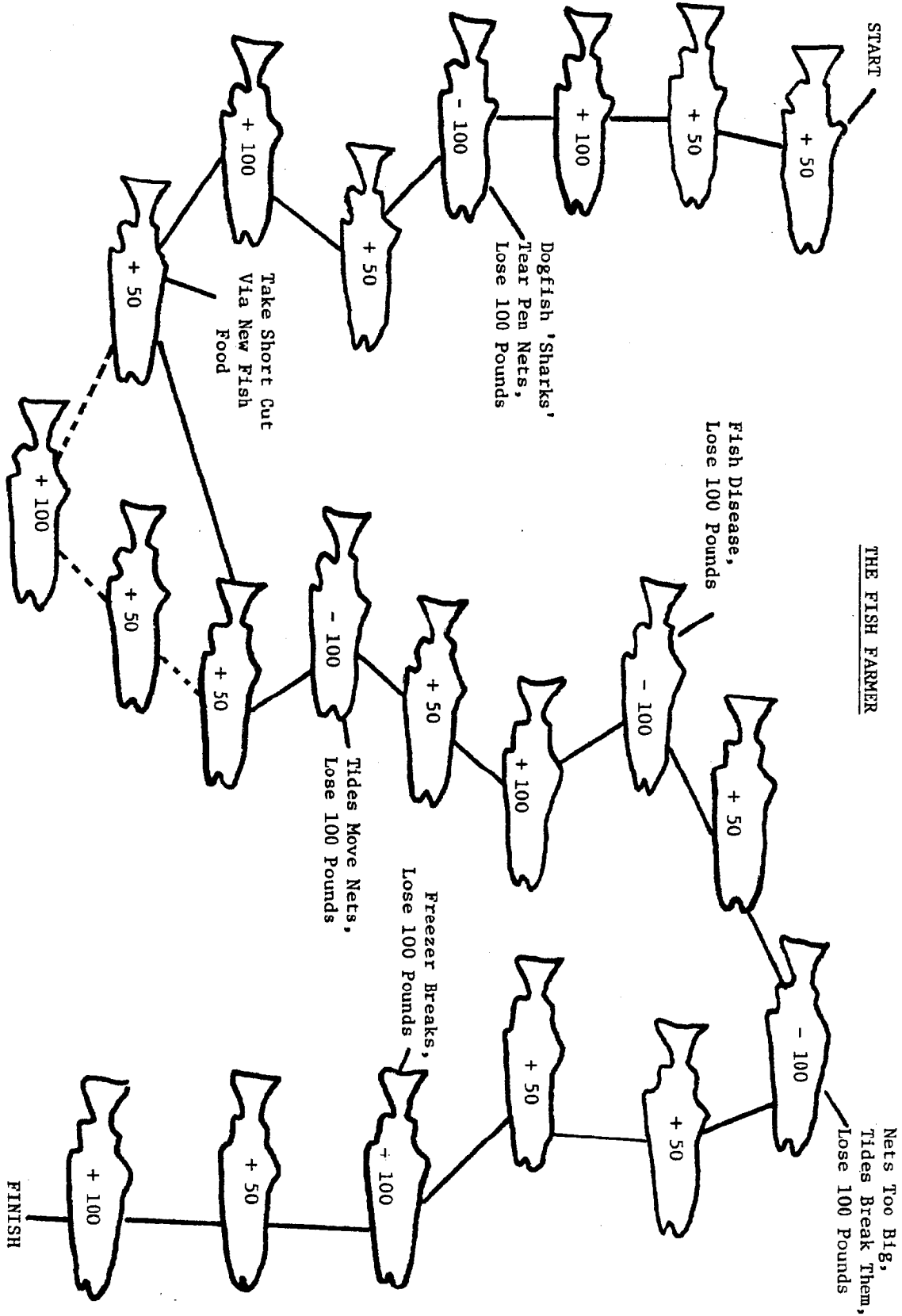
outbreak - sudden appearance of something

tide - the periodic rising and falling of the ocean's water level

value - in this case, the price or worth

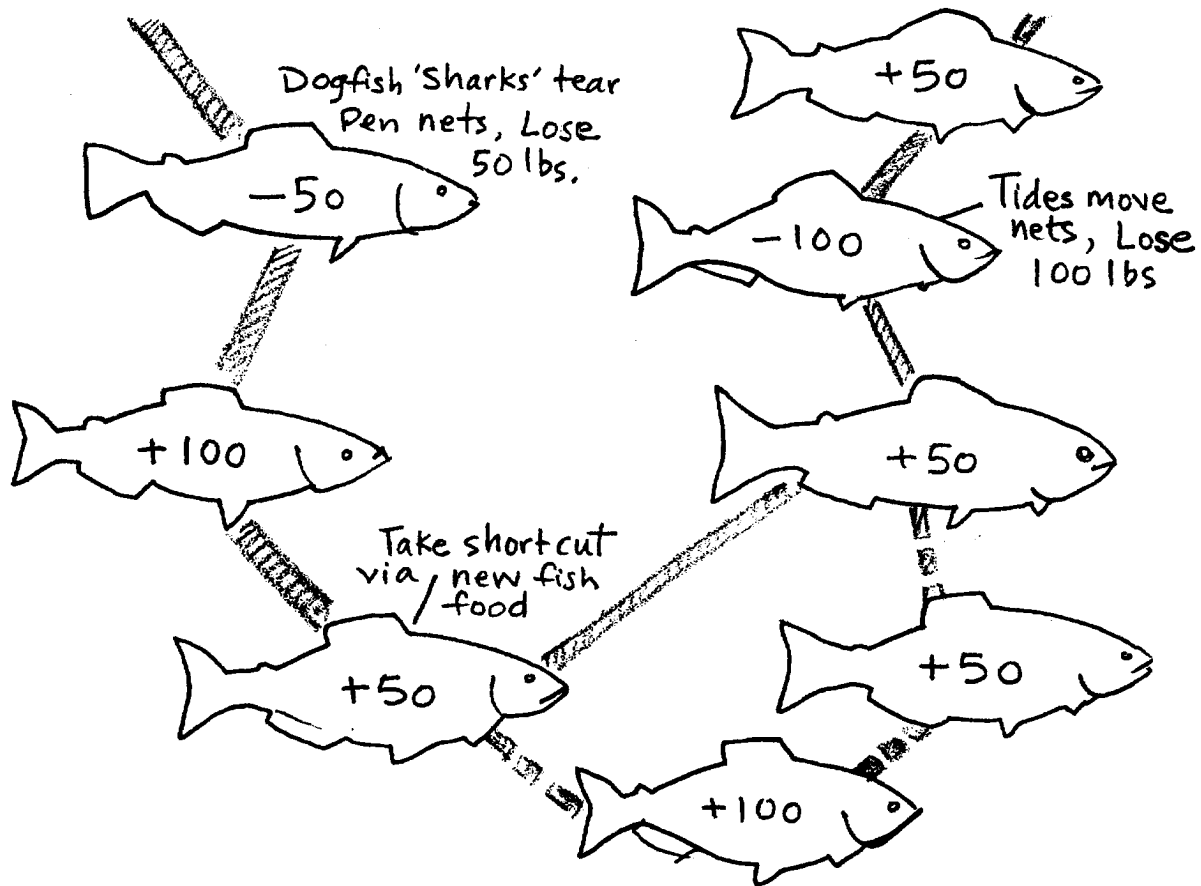
Extension

1. Creation of additional clue cards make many new games possible. The cards may be modified to suit any type of math problems. The clue cards may also be changed to allow this game board to be used as a reading game. You will probably notice many possibilities.



<p>Bad tides, lose 135 pounds. New feed, gain 235 pounds. Net Change?</p> <p>Answer: 100 pounds gain</p>	<p>Bad choice of food, lose 242 pounds. New shipment of fish, gain 42 pounds. Net change?</p> <p>Answer: 200 pound loss</p>
<p>Decrease pen size, gain 87 pounds. Fix hole in net, gain 113 pounds. Net change?</p> <p>Answer 200 pounds gain</p>	<p>Pen size too big, lose 66 pounds. New fish medicine, gain 166 pounds. Net change?</p> <p>Answer: 100 pounds gain</p>
<p>New fish medicine, gain 54 pounds. New fish food, gain 46 pounds. Net change?</p> <p>Answer: 100 pounds gain</p>	<p>Income tax refund, gain 245 pounds. Fish disease, lose 45 pounds. Net change?</p> <p>Answer 200 pounds gain</p>
<p>New freezer saves time, gain 67 pounds. Fish disease outbreak, lose 17 pounds. Net change?</p> <p>Answer: 50 pounds gain</p>	<p>Current carries away pen, lose 73 pounds. Warmer water, gain 173 pounds. Net change?</p> <p>Answer: 100 pounds gain</p>
<p>Dogfish tear net, lose 89 pounds. New fish food, gain 189 pounds. Net change?</p> <p>Answer: 100 pounds gain</p>	<p>New pens, gain 187 pounds. New medicine, gain 13 pounds. Net gain?</p> <p>Answer: 200 pounds gain</p>

Fish Farmer



Fish farmers have to make a lot of decisions. They want to keep their fish healthy. They want to make money. They want to stay in business. What they want influences the choices they make.

In the following game, you'll have a chance to be a fish farmer. Read the directions and play the game. The object is to reach the finish first.

Here's What You Will Need

For each pair of students:

- "Fish Farmer" game board and cards
- 2 game markers
- scratch paper and pencils

Directions

1. Stack the cards face down on the board. Throw the die. Lowest number goes first.

2. Player Two picks a card off the top. She reads the problem and question to Player One.
3. Player One must work out the problem (on paper or “in head”). Then he responds with the answer.
4. Player Two checks the answer. If the answer was correct, Player One may advance his marker. He moves forward on the game board the number of pounds of his answer.

For example, let’s say Player One’s answer was 100 pounds. He would move forward 100 pounds worth of fish. He could move two 50 pound fish or one 100 pound fish. The value of a fish is listed inside its drawing on the game board.

5. After Player Two has asked the question, the roles change. The game continues by changing roles until one player reaches the finish. That player is the winner.
6. Good luck!