

# DRAFT

## Teacher Guide

This teacher guide offers ideas for classroom discussion and activities with young readers. Most content and activities can be adapted for any grade level.

Read the passage from History by the Sea: The Ships That Made Alaska. Ask students if they remember what our country was called before it was named America. Christopher Columbus sailed to the New World. Today, do we still call America the New World? Why not? The quote infers that because transportation by sea made Alaska more accessible to the world, Alaska is no longer really a Last Frontier. Do you agree? People from around the world connect Alaska with the nickname, the Last Frontier. Maybe its time we think of a new one. What could be a more up-to-date nickname for Alaska? “The Best Frontier!”

*Vocabulary: ALCAN, Last Frontier*

Read the section, What is the Alaska Marine Highway? Ask students if anyone has been to or lived in a roadless community. What advantages do communities with roads have over living in roadless community? Answers may vary but might include access to goods only found in other places, health care, entertainment, etc.

*Vocabulary: Alaska Marine Highway System, ferry, roadless community, Juneau*

Read the section, From “Blue Canoe” to 50 Years of Service. Ask students if they think they know what Blue Canoe refers to. The last paragraph is the AMHS mission statement. A mission statement is usually a short paragraph stating the company’s purpose. Reread the paragraph and see if it sounds like a good one for the AMHS.

*Vocabulary: Blue Canoe, Chilkat, mission statement, anniversary, transportation*

Read the section, An All-American Road. The other byways in Alaska are the George Parks Highway, the Glenn Highway, the Haines Highway and the Seward Highway. The Seward Highway was also designated as an All-American Road.

*Vocabulary: Byways, All-American Road*

Read the section, Every Stop is a Cultural Experience.

Have students visit the communities webpage at <http://www.dot.state.ak.us/amhs/communities.shtml> and do a short report on one community. This could be extended to involve pairs and presentations. Teachers could also decide to assign communities.

*Vocabulary: Hoonah, Alaska Native*

Read the section, An Exciting Career at Sea.

Do drivers feel as bonded to their taxis, dump trucks or semi-trucks as a captains to their ships? The worksheet that goes with this section helps students to learn real occupations at the AMHS as well as help them become aware of the other occupations needed by the AMHS.

*Vocabulary: Trusty Tusty, captain, steward, career, maritime*

Ask students what the quote by Arthur C. Clarke means? Students should reply that our planet is mostly covered by water.

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## Resource Links

<http://www.ferryalaska.com>

This link takes you to the home page for the AMHS. In the middle is a link for a virtual tour. It will open a series of videos starting with about eight minutes dedicated to captivating footage of ports, scenery, wildlife and passenger life aboard a ferry. The video continues on from there with an interview from a ferry captain, then a look at the routes and then a detailed look at the amenities on a ferry. Watch just a few minutes to get an idea or watch everything!

<http://www.dot.state.ak.us/amhs/employment.shtml>

Lists employment opportunities for those eligible.

<http://www.alaska.gov/kids/>

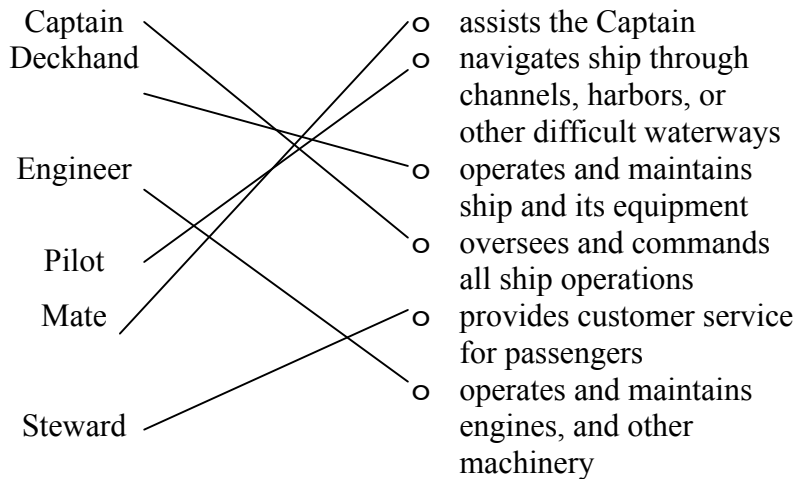
Factual information about Alaska designed for kids.

<http://www.akcis.org>

The Alaska Career Information System (AKCIS) is a career focused website for Alaskans. Login from your school site or as a guest to learn about career opportunities in the Transportation career cluster. You can also locate schools that offer certificates and degrees in maritime.

## Alaska Marine Highway Career Awareness Activity

Below are some real jobs if you are interested in a career on a ferry. Draw a line from the job title to the correct description. You can visit these and other job postings on the Alaska Marine Highway's employment website at located at [www.dot.state.ak.us/amhs/employment.shtml](http://www.dot.state.ak.us/amhs/employment.shtml).



Below are occupations you might not think have anything to do with operating a ferry system. How do you think each occupation could be utilized by the AMHS? (Answers will vary)

- Electrician
- Chef
- Driver
- Accountant
- Plumber
- Security Officer

Alaska Marine Highway Vocabulary Activity

Solution

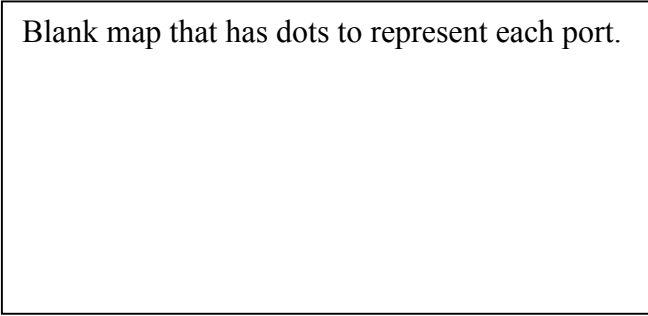
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- (Over, Down, Direction)
- ALASKAMARINEHIGHWAY (5, 1, S)
- ALASKANATIVE (9, 17, NE)
- ALLAMERICANROAD (2, 18, E)
- ANNIVERSARY (19, 11, N)
- BLUECANOE (10, 1, SW)
- BYWAYS (15, 10, NW)
- CAPTAIN (11, 14, S)
- CAREER (18, 13, SW)
- CHILKAT (12, 17, NE)
- FERRY (19, 16, N)
- HOONAH (1, 8, E)
- JUNEAU (9, 3, W)
- MARITIME (15, 12, W)
- MISSIONSTATEMENT (12, 16, N)
- ROADLESSCOMMUNITY (19, 14, W)
- STEWARD (9, 10, NW)
- TRANSPORTATION (18, 11, W)
- TRUSTYTUSTY (4, 9, E)

## Alaska Marine Highway Port Activity

Directions: Using the website [www.dot.state.ak.us/amhs/routes.shtml](http://www.dot.state.ak.us/amhs/routes.shtml), write the full name of each port in its correct location. On the website, you will put the mouse over each port's abbreviation to discover the full name and other details. For example, WRG is short for Wrangell.

Blank map that has dots to represent each port.



## Alaska Marine Highway Community Activity

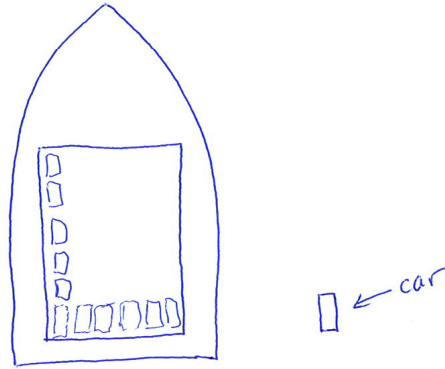
Directions: Using the internet website [www.dot.state.ak.us/amhs/routes.shtml](http://www.dot.state.ak.us/amhs/routes.shtml), Pick one community along the Alaska Marine Highway to research. Click on the port of your choice. Then click the box that says, *More About This Community*. Read about the community and provide answers to the following questions below.

1. There is a link to the community's own website at the top. Write down the website address  \_\_\_\_\_
2. Write a brief description of where the community is located.
3. What is its Latitude? \_\_\_\_\_
4. What is its Longitude? \_\_\_\_\_
5. What is the community's economy dependent on? \_\_\_\_\_
6. Where is your community on the map? Draw a dot in the correct location and label it.

Find a map that is blank but has long and lat on it.

## Alaska Marine Highway Vessel Activity 1

1. Use the diagram of the M/V Fairweather to estimate how many vehicles it can carry.



I estimate the Fairweather can carry 36 exactly vehicles.

2. If vehicles were put bumper to bumper, the ferry could carry up to 720 feet. How long do you think the average vehicle is? What is your new estimate for how many vehicles can fit on the Fairweather? 36.

3. Since vehicles come in different lengths, do you think this will affect how many can fit? Explain.

*Less or even more vehicles may fit depending on length.  
Longer vehicles or ones with trailers will cost more money  
than smaller ones.*

## Alaska Marine Highway Vessel Activity 2

The M/V Fairweather is one of the fastest ferries on the Alaska Marine Highway. In contrast, the M/V Columbia is slower ferry but carries more people and vehicles. From the two pictures and the information provided, which ferry do you think is the Fairweather and which one is the Columbia? Write each name in the space provided.

Name:



|                         |           |
|-------------------------|-----------|
| Year Built:             | 1974      |
| Length (ft.):           | 418       |
| Beam (ft.):             | 85        |
| Displacement (LT):      | 7,683     |
| Loaded Draft:           | 17'-6.13" |
| Service HP:             | 10,800    |
| Service Speed (kn):     | 17.3      |
| Domestic Tons:          | 3,946     |
| International Tons:     | 13,009    |
| Crew Capacity:          | 66        |
| Passenger Capacity:     | 600       |
| Total Staterooms:       | 103       |
| Total Berths:           | 294       |
| Vehicle Capacity (ft.): | 2,680     |
| Vehicle Quantity:       | 134       |

Name:



|                         |        |
|-------------------------|--------|
| Year Built:             | 2004   |
| Length (ft.):           | 235    |
| Beam (ft.):             | 60     |
| Displacement (LT):      | 787    |
| Loaded Draft:           | 8'-6"  |
| Service HP:             | 19,310 |
| Service Speed (kn):     | 32     |
| Domestic Tons:          | 1,280  |
| International Tons:     | 3,442  |
| Crew Capacity:          | 10     |
| Passenger Capacity:     | 250    |
| Total Staterooms:       | 0      |
| Total Berths:           | 0      |
| Vehicle Capacity (ft.): | 720    |
| Vehicle Quantity:       | 36     |



## Locate the Information

1. In what year was the Columbia built? 1974
2. How many years older is the Columbia than the Fairweather? 30 years
3. What is the total passengers capacity on the Columbia? 600  
on the Fairweather? 250
4. A bed on a ferry is called a berth. How many berths are there total on the Columbia? 294 on the Fairweather? 0
5. The length of the Fairweather is 235 feet (inches, feet, yards, miles)

## Analyze the Information

Ships measure their speed in knots (kn) and nautical miles. If your ship is traveling at a speed of 1 knot, then you are said to be going 1 nautical mile per hour. A knot is approximately equal to 1.15 miles per hour (mph). Locate the service speed for each ferry and answer the following questions.

How fast is the Fairweather going in nautical miles per hour? 32 kn

How fast is the Columbia going in nautical miles per hour? 17.3 kn

Convert the Fairweather's nautical speed to miles per hour. 38 mph

Convert the Columbia's nautical speed to miles per hour. 19.9 mph

The distance between Juneau and Skagway is about 72 nautical miles. If both ferries left Juneau at the 9:00 AM, how long would it take for each ferry to arrive in Skagway? What times would each arrive?

*It would take the Fairweather 2 hours and 15 minutes so it would arrive at 11:15 AM*

*It would take the Columbia about 4 hours and 9 minutes so it would arrive at 1:09 PM*

Divide 72 nautical miles by the ferry's speed. That will give you how long in hours and minutes. Then you can add the hours and minutes to the clock and get the time each ship arrives. Ex.  $72 \div 32 = 2.25$  which is 2 hours and 15 minutes. Add it on to 9:00 AM and the arrival time is 11:15 AM.

## Evaluate Your Information

Look closely at your answers for #3 and #4. What is interesting about the answers you found between the two questions?

*There are twice as many passengers as there are berths on the Columbia and there are no berths on the Fairweather. Where do all of those passengers sleep? One of the unique and special experiences of traveling on an AMHS ferry is that you can pitch a tent and camp on the ship. Passengers may also choose to sleep on one of the many lounge chairs provided.*