

Introduction

In this well-stirred, topsy-turvy adventure, players morph into characters with unique skills. Immersed in a pliant fantasy environment, they explore three worlds (Fig. 1) in a quest for **Knowledge Weapons** to use in their battles against **Thor**. As they face perils (Fig. 2) and amass points, they group into squads to vanquish the foe of **Intellectual Darkness**. Players finally converge to the center of their universe (Fig. 1) with the **Knowledge of Victors**, but not realizing it — being so engrossed in their adventure.

Fig. 1.
Worlds

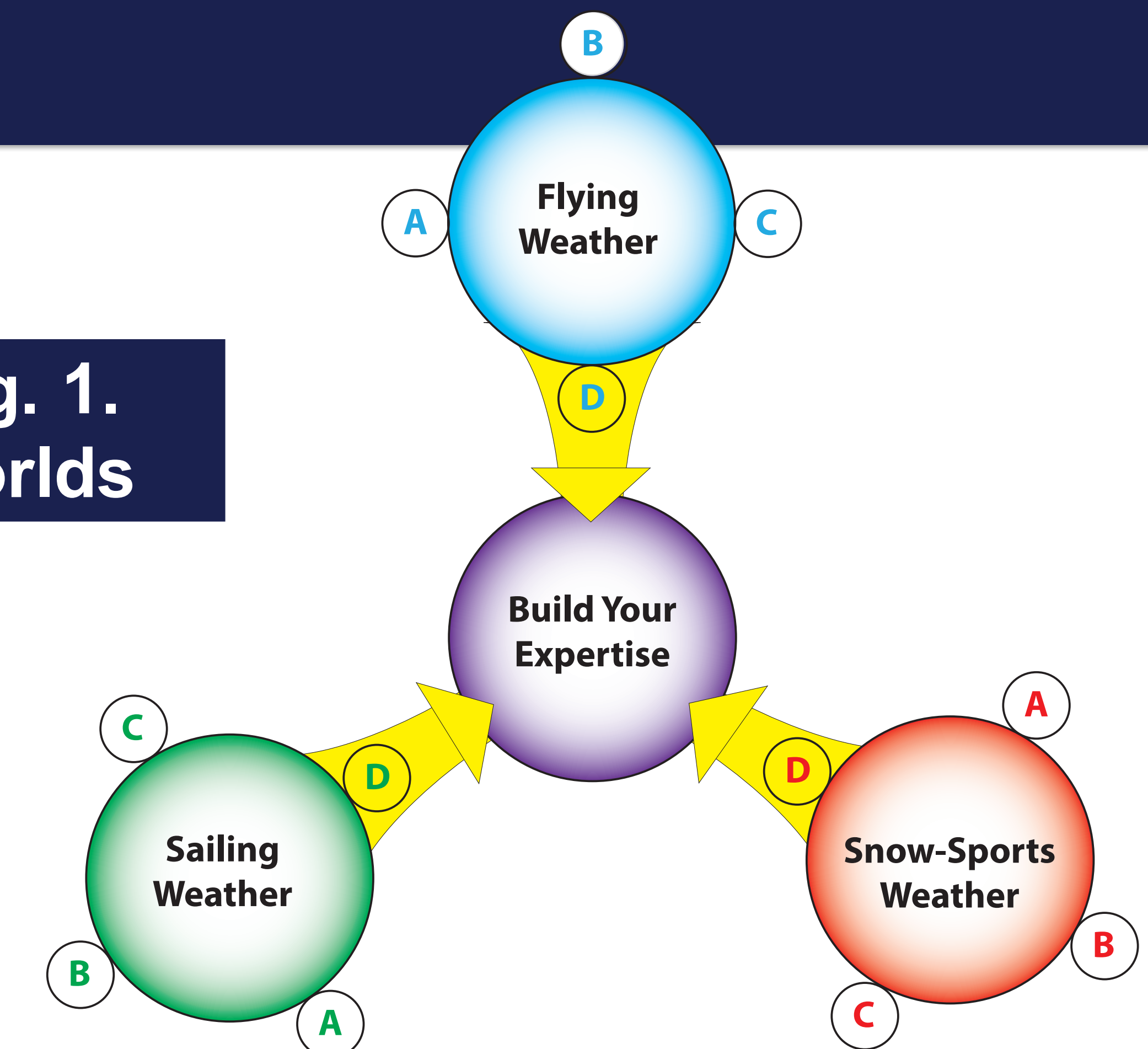


Fig. 2.
Perils

Sailing Weather - Module __ (sample) __.

Pre-readings and Online Activities

1 Scenario / Narrative

It is a beautiful Spring day, so you decide to take 2 friends sailing with you in your sailboat. You depart Vancouver near Granville Island at 10 am to sail south to Sydney on Vancouver Island. When you are halfway across the Georgia Strait, you see a line of thunderstorms approaching from the northwest.

1.1 What should you do?

2 Access to Related Info

- 2.1 Boat
- 2.2 Maps
- 2.3 Regulations & Limitations
- 2.4 Skipper Experience Level
- 2.5 Passengers & Cargo
- 2.6 Other Factors

3 Your Weather Queries

Type in the weather questions you want to ask. (Example: Will the storm hit us?)

(Student input here). Examples:
Will the storm hit us before we reach our destination?
How strong is it?
How long will it last?
What storm hazards could affect us?

3.1 Submit

4 Meteorological Concepts

Typical Hazards	Diagnostics	Resources	Check Your Understanding
1a Winds & Gusts	1d Soundings & CAPE	1c Convect. Fcsts.	1d Check1
2a Waves	2d Wind, fetch, duration	2c Marine Forecasts	2d Check2
3a Lightning	3d Charge formation	3c Threat maps	3d Check3
4a Hail	4d Hail formation	4c Radar & Satellite	4d Check4

Group Activities (not available until individual pre-readings & checks are done)

5 Data Available at Start of Trip

5.1 Your Own Observations

5.2 Weather Maps & Animations

5.3 Radar & Satellite Images

5.4 Atmospheric Soundings

5.5 Marine Fcsts & Advisories

5.6 Other Info

Group Blog

(Example)

Rockhound: The sounding looks complicated - how do I read it?

JoeGeek: Back in section 4, the Sounding button tells how to read soundings.

Elvis: Why do we need the sounding anyway?

...

NewGuy: Based on the speed of the approaching storm and the sailboat specs, I think we can get to the destination before the storm gets us.

Steadfast: But the thunderstorm forecast is not skillful, so it would be risky.

...

Don't know how to interpret these data? See interpretation tips back in Step 4.

Send

6 Your Recommendations

	Group Member:	1	2	3	4
6.1	Continue south to the destination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.2	Turn NW directly toward the storm. After it passes, go to Sydney	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.3	Drop anchor. Drop all sails. Ride out the storm.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
6.4	Return to the starting point	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.5	Divert to the nearest safe haven	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.6	Other (describe below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

(Student input here). Examples:
Member 4: Sail next to a large cargo ship to shield us from the wind.

Submit other recommendation

Note: Your grade will depend on whether your individual recommendation is correct, AND on how many of your team members agree with you. Feel free to go back to Step 5 to discuss more on the group blog before you make your final decision. No changes allowed after you check your box below.

Group Member:	1	2	3	4
Yes, my decision is final:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Deadline to finish sections 1 - 6 is indicated on course web page, after which sections 7 - 10 will be revealed.

7 Actual Outcome

7.1 This scenario was based on a real accident reported by the authorities.

The skipper continued toward the destination with reefed sails to reduce the chance of capsizing, but as a result the forward speed decreased. The gust front from the thunderstorm squall line reached the boat before making port, causing the boat to capsize in the Georgia Strait. The boat sunk. The skipper and one passenger drowned. The second passenger, who was wearing a wet suit, survived and was rescued by the Coast Guard.

8 Related Stories and Links

- 8.1 [The Hobart race](#)
- 8.2 [Round the World Race - UBC skipper wins.](#)
- 8.3 [Weather tips for sailors](#)
- 8.4
- 8.5
- 8.6
- 8.7
- 8.8
- 8.9

9 Thoughts by Experts

- 9.1 Interview of UBC grad Eric Holden, winner of the 2014 Round the World Race.
<https://www.youtube.com/watch?v=qTIPAcetK1w>
- 9.2
- 9.3



10 Do-over / Reset

If you could start over (knowing the actual outcome from Step 7), what would you do differently?

(Sample student answer)

Check the forecast and soundings before departing. Learn more about how thunderstorms work before making the trip. Talk to more experienced sailors to get their opinion. Provide wet suits for all on board. Make more conservative decisions because lives depend on it.

Submit

End of Sailing-Weather Module __ (sample) __