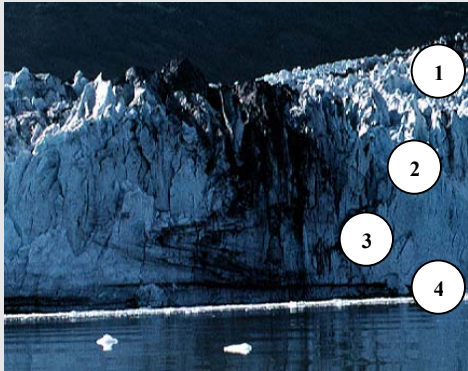


Science 7 - Numerical Response Questions - Heat and Temperature

Sample ...

1. Identify the parts of a glacier.
(As outlined on p. 194 in SF7)



- | | | | |
|------------|----------|-------------|-------------|
| <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> |
| loose snow | firn | glacial ice | plastic ice |

1	2	3	4
.	.	.	.
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

2. Match the description with the relative temperature it represents.

- 1 normal body temperature
- 2 freezing point of water
- 3 boiling point of water in Calgary
- 4 temperature of ice cream

_____ _____ _____ _____
-5°C 0°C 37°C 97°C

.	.	.	.
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

3. Which device would you use for each of the following situations.

- 1 To record heat loss in a building
- 2 To measure temperature changes over a month
- 3 To create an electrical current
- 4 To control an electric switch by expanding and contracting

- _____ thermocouple
_____ bimetallic strip
_____ recording thermometer
_____ infrared thermogram

.	.	.	.
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

4. Match the change in state with the term that is used to describe it.

- 1 solid to liquid
- 2 liquid to gas
- 3 solid to gas
- 4 liquid to solid

- _____ evaporation
_____ fusion
_____ sublimation
_____ solidification

.	.	.	.
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

5. **Energy Transfer** – energy can be transferred from place to place depending on the medium it goes through. Match the type of energy transfer with each medium.

- 1 radiation
- 2 convection
- 3 conduction

- _____ solid
_____ liquid
_____ gas
_____ space

.	.	.	.
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

6. There are different sources of **thermal energy**. Match the source with its description.

- 1 chemical
- 2 electrical
- 3 geothermal
- 4 solar

- _____ falling water generates energy
_____ the sun provides energy
_____ heat below the Earth's surface
_____ burning of wood and fossil fuels

.	.	.	.
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9