| Date: LI: To understand the climate of a mountain environment. | | | | | | | | | | | | | |
|---|---------------|-----------------|---------------|---------|----------|----------|---------|----------|-------------|-------|--------|--------|-----|
| | | A۱ | erage t | temper | ature a | it the s | ummit | of Mo | ount E | veres | st | | |
| | 0 — | Jan Fe | eb Ma | r Apr | May | June | July | Aug : | Sept | Oct | Nov | Dec | |
| | -5 — | Ш | | | | | | | | | | | |
| | -10 — | | | | | | | | | | | | |
| | -15 — | | | | | | | | | | | | |
| | -20 — | Н | | | | | | | | | | | |
| | -25 — | | | | | | | | | | | | |
| | -30 — | | | | | | | | | | | | |
| | -35 — | | | | | | | | | | | | |
| | -40 | | ı | | ı | | | | | | | | |
| Tomas | Jan | Feb | Mar | Apr | May | June | July | Aug | | | Oct | Nov | Dec |
| Temp (°C) | -36 | -35 | -32 | -31 | -25 | -20 | -18 | -18 | -2 | 1 | -27 | -30 | -34 |
| Ī | Use the | e infor | <u>mation</u> | in the | graph | and t | able to | o ansv | ver th | ne qu | ıestic | ns bel | ow: |
| Wha | nt is the | averag | ge temp | eratur | e at Eve | erest's | summ | it in No | oveml | ber? | | | |
| What is the average temperature at Everest's summit in November? What is the average temperature at Everest's summit in March? | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 3. Which is the coldest month of the year at Everest's summit? | | | | | | | | | | | | | |
| 1. Which is the warmest month of the year at Everest's summit? | | | | | | | | | | | | | |
| 5. Why do you think it is warmer in June, July and Aug compared to Dec, Jan and Feb? | | | | | | | | | | | | | |
| 6. What is the difference in temperature between May and July? | | | | | | | | | | | | | |
| 7. By how far does the temperature drop from August to January? | | | | | | | | | | | | | |
| - | | | | | | | apast. | co Juiil | aui y i | | | | |
| Tick | the tw | o stater | | | | | | | | | | _ | |
| | | | It is wo | armer a | it Evere | est's su | mmit i | n April | than | Mar | ch. 🔼 | | |
| | | Th. | winter | month | | arm or | than t | ha sees | · • • • • • | mast | hc F | = | |

Now look at the temperature data for Everest Base Camp and answer the questions:

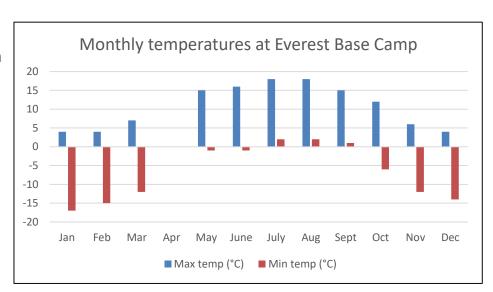
| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-------------|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|
| Max (°C) | 4 | 4 | 7 | 10 | 15 | 16 | 18 | 18 | 15 | 12 | 6 | 4 |
| Min (°C) | -17 | -15 | -12 | -5 | -1 | -1 | 2 | 2 | 1 | -6 | -12 | -14 |

Monthly temperatures at Everest Base Camp (EBC):

| 1. | Which is the coldest month at Everest Base Camp? | |
|----|--|--|
| 1. | Which is the coldest month at Everest Base Camp? | |

| 2. | Which is the warmest month at Everest Base Camp? | |
|----|--|--|
| | | |

- 3. What is the difference between the min and max temperature in August? ______
- 4. What is the difference between the min and max temperature in January? ______
- 5. Draw in bars for the minimum and maximum temperatures in April.



6. At what time of day do you think the minimum temperatures were recorded? Explain your answer.

7. In how many months does the minimum temperature drop below freezing (0°C)? _____

8. Tick the statement which is *incorrect*:

The maximum temperature in July is the same as August.

Everest Base Camp is coldest in January.

The temperature at Everest Base Camp goes below freezing (0°C) in July.

Extension: If you travelled to Mount Everest, what time of year would you go and why?

Answers

Page 1 - Everest's summit:

- 1. -30°C
- 2. -32C
- 3. January
- 4. July and August
- 5. June, July and August are warmer because they are the summer months. December, January and February are colder winter months.
- 6. 7°C
- 7. 18°C
- 8. Statement 1 and 3 are correct.

Page 2 - Everest Base Camp:

- 1. January has the lowest max and min temperatures.
- 2. July and August
- 3. 16°C
- 4. 21°C
- 5. Max 10°C and min -5°C
- 6. The minimum temperatures occurred at night.
- 7. 9 months (all except July, August and September)
- 8. Statement 3 is incorrect.

Extension:

The most logical answer would be to go in the months of July, August and September because this is the warmest time of year to go.