TAPS Scotland
Focused Assessment example

Topic: Planet Earth: Biodiversity	Primary 7 Age 10-11	Title of example: Titanic temperature conclusions

Scientific skills focus

Analyse and interpret:
Draws basic conclusions consistent with findings.
Relates findings to the wider world

Curriculum link

I can relate physical and behavioural characteristics to their survival or extinction. SCN 2-01a

Example

As part of a Titanic topic, the children explored the temperature of iced water and how quickly the body might cool in a crowded or empty life boat. They measured changes over time in the temperature of 'people pots' in a 'lifeboat container' in a tray of iced water.

They used the class results to draw their own conclusions.

Children meeting the objective would be able to recognise the pattern and relate this to the simulation:

"We discovered that the temperature of the pot on its own went down much quicker than the box with lots in. I think this happened because all the heat coming from the other pot made it stay warmer than the one on its own."

"We slowly started to see that the boat with only one person their temperature started to drop very quickly while the group of peoples dropped very slowly. This is caused by the body temperature of each of the people. They were keeping each other warm with body heat."

"In conclusion, the tub that had more pots stayed warmer longer as the other one went down a lot quicker. So people that were in emptier boats might have gotten hypothermia quicker than in the fuller boats."

Time	Empty lifeboat temperature in degrees celsius	Full lifeboat temperature in degrees celsius
0	38.7	38.3
1	36.3	37
2	34.3	35.9
3	32.6	35.7
4	31.5	34.7
5	30.3	34.1
6	29.1	33.7
7	28.1	33.3

A similar investigation could be linked to animals like penguins who huddle to keep warm.

Example from St Margaret's RC Primary, Stirling