1. 1c:

A: Tornado

B: There’s a tornado coming

C: Tornadoes are vertical funnels of rapidly spinning air. Their winds may top 250 miles an hour and can clear a pathway a mile wide and 50 miles long. Also known as twisters, tornadoes are born in thunderstorms and are often accompanied by hail.

D: Like all winds and storms, tornadoes begin when the sun heats the surface of the land. As the warm, less heavy air begins to rise, it meets the colder, heavier air above it. The faster-moving air begins to spin and roll over the slower wind. As it rolls on, it gathers pace and grows in size. At this stage, it is an invisible, horizontal wind spinning and rolling like a cylinder. As the winds continue to build up, stronger and more powerful warm air forces the spinning winds vertically upward, causing an updraft. With more warm air rising, the spinning air encounters more updraft. The winds spin faster, vertically upwards, and gains more momentum. At this stage, the spinning winds create a vortex and the wind has enough energy to fuel itself. The tornado is fully formed now and moving in the direction of the thunderstorm winds.

E: Based on previous observations and statistical models, we are able to predict the weather in the future. We developed an understanding of the different interactions between temperature changes, hot air rising up and mixing with cold air and tornados.

A: Hail

B: It is hailing

C: Hail forms when thunderstorm updrafts are strong enough to carry water droplets well above the freezing level. This freezing process forms a hailstone, which can grow as additional water freezes onto it. Eventually, the hailstone becomes too heavy for the updrafts to support it and it falls to the ground.

D: Hail is formed by updrafts inside these large cumulonimbus clouds, which carry droplets upwards to 13km - 20km above sea level. The updrafts are present at the base of these clouds and rising quickly, almost horizontally through the cloud. In the right conditions, this updraft can develop into a "supercell", which drastically increases its potential for creating large hail. These supercells form when the environmental winds change direction and speed - usually due to the formation of mountain ranges nearby or different air masses combining. The temperature difference between these two different air masses is what gives the storm its ability to create hail.

E: Based on previous observations and statistical models, we are able to predict the weather in the future. We developed an understanding of the different interactions between temperature changes, evaporation and hail.

1. 2e: A brain tumor, because it fits all the analysis and gives answers to them all.
2. 2f: ‘FullStory’, weakness: it does not have data connectors.

strength: Increase revenue through better conversion.

DataLab preparation (week 2 datalab day 1)

* The Loebner Prize was an annual competition in [artificial intelligence](https://en.wikipedia.org/wiki/Artificial_intelligence) that awards prizes to the [computer programs](https://en.wikipedia.org/wiki/Computer_program) considered by the judges to be the most human-like.
* The format of the competition was that of a standard [Turing test](https://en.wikipedia.org/wiki/Turing_test). In each round, a human judge simultaneously holds textual conversations with a computer program and a human being via computer. Based upon the responses, the judge must decide which is which. In 2019 the format of the competition changed. There was no panel of judges. Instead, the chatbots were judged by the public and there were to be no human competitors.
* Originally, $2,000 was awarded for the most human-seeming program in the competition. The prize was $3,000 in 2005 and $2,250 in 2006. In 2008, $3,000 was awarded.

In addition, there are two one-time-only prizes that have never been awarded. $25,000 is offered for the first program that judges cannot distinguish from a real human and which can convince judges that the human is the computer program. $100,000 is the reward for the first program that judges cannot distinguish from a real human in a Turing test that includes deciphering and understanding text, visual, and auditory input. Once this is achieved, the annual competition will end.