## **Data Features Summative Quiz**

Congratulations! You passed!  TO PASS 80% or higher  Keep Learning  GRADE  1000/
100%
Question 1  Modern deep neural networks work well because:
1/1 point O
They can scale up to very large amounts of data
$\circ$
They use input data that is in a very sophisticated, high level, feature representation.
0
They are based on clear, logical rules that are designed based on expert knowledge
0
They use very complex, sophisticated algorithms
Correct
Yes, each neuron is quite simple, but you can combine a lot of them to handle a lot of data. In general, machine learning works best if you have a lot of data
2. Question 2 What is the output of a regression?
1 / 1 point C
A picture
0
One of a set of categories
0
A reward or punishment
One or more numbers
One of more numbers
Correct

Yes, regression outputs numbers

3. Question 3 The feature representation you use has no effect in k-nearest neighbour because it is based on similarity? 1 / 1 point True **False** Correct That's right. How you measure similarity is probably the most important aspect of the nearest neighbour method, and that will depend a lot on which features you are using 4. Question 4 Which of these is true? 1 / 1 point If you are using high level features you will need more training data than if you are using low level features If you are using low level features you will need more training data than if you are using high level features 0 The features do not affect how much data you need Correct Yes, it is easier to learn using high level features, which means you will need less data to learn a particular concept 5. Question 5 Which do you typically think need more disc space? 1 / 1 point

## 0

Low level features

High level features

**Correct** 

That's right, high level features typically encode smaller, more meaning full information, like words. Low level features typically encode the raw data, like audio samples or pixel, which can