

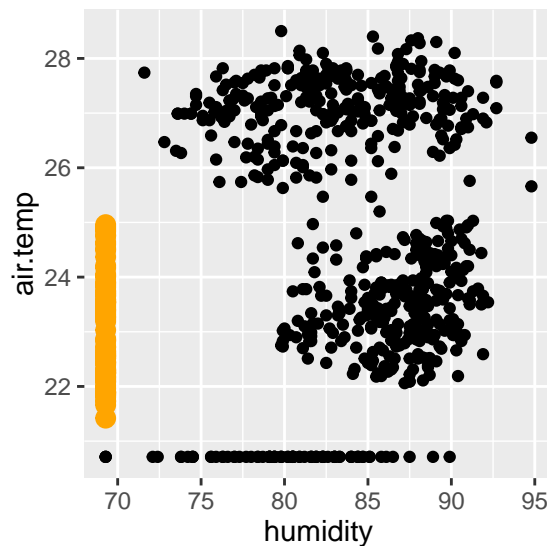
# ETC 2420/5242 Quiz 5

## SOLUTION

1. Match the dplyr verb to the action

verb	action
Arrange	Reorder the rows
Summarise	Make summaries of subsets
Filter	Produce subsets
Select	Choose columns
Mutate	Create new variables
Ungroup	Removing existing grouping

2. In the plot below we are looking at the relationship between humidity and air temperature as measured by Pacific Ocean buoys monitoring El Nino. There are missing values coded as 10% below the minimum on both variables.
  - a. Circle the cases that are missing on humidity but not on air temperature. Coloured orange
  - b. Are the missings on humidity independent of air temperature value? It doesn't look like it because missings on humidity fall at lower values of ar.temp



3. Put these words into the right synonym group

Cases: records, example, instance, individuals, subjects, experimental units Variables: attributes, fields, features

4. For the following data, write down the variables that have been measured.

religion and salary

religion	<\$10k	\$10-20k	\$20-30k	\$30-40k
Agnostic	27	34	60	81
Atheist	12	27	37	52
Buddhist	27	21	30	34
Catholic	418	617	732	670
Don't know/refused	15	14	15	11