



Key Stage 3/4 Inductive Statements

a) 27% support Manchester United	k) Liverpool was the second most popular football team	u) Boys favourite school subject is P.E.
b) 34% of 11 to 16 year olds walk to school	l) 25 out of every 100 secondary school pupils travel to school in cars	v) The average Year 8 pupil is 156cm tall
c) The size of households ranged from 2 to 95	m) 163cm is the average height of females born in 1985	w) There were 1.3 girls for every boy in our study
d) Boys 47.75% Girls 52.25%	n) 8.3% of secondary school children have birthdays in May	x) Only 7% of the children were born outside England and Wales
e) More children are born in September than in any other month	o) 2.7% of pupils were born outside Europe	y) One in twelve children moved house in the last year
f) The most common size of household was 4 people	p) The average number of under 18s living in a household is 2.3	z) 3.1% travelled to school by train or tube
g) Art was a close second to P.E. in being the most popular subject at school	q) In year 7 the most common height was 150cm	aa) 42% of households have 2 cars and 37.4% have 1 car.
h) 55% live less than 3km from their school	r) 3% of pupils travelled more than 30km to school	bb) The mean time taken getting to school was 19.66 minutes.
i) English was counted as favourite by 7.4% of pupils	s) February was the month you are least likely to be born in.	cc) 6 out of 10 chose Maths as their favourite subject
j) 39 out of every 100 live in households with 5 or more people	t) The most popular day of the month to be born on is the 8 th .	dd) Only 7 in every 100 households have no car

These statements are all from the database created from Phase 1 of CensusAtSchool. They are intended to be used for teaching in an inductive style:-

They should be given to the class or group, cold, and pupils invited to classify the statements in any way they wish. Then discussion follows as to why they have chosen to classify those particular statements together. This should lead onto further work in the chosen areas. All figures are for Key Stage 3/4 only (year groups 7 to 11). Possible classifications include: percentages, ratios, pets, birthdays, heights

Inductive Model of Teaching

Phases of teaching:

Phase 1: Identification of the focus of the inquiry

The focus and boundaries of the inquiry are established.

What knowledge or subject-specific skill do you want students to gain from the task?

What learning skills do you want students to gain?

Phase 2: Presentation of Data

The data set is assembled and presented.

The items of data are numbered, labeled or can be cut out to form totally separate items.

Phase 3: Examination of Data

The items in the data set are thoroughly studied and their attributes are identified.

Phase 4: Formation of Concepts by Classifying

Students classify the items in the data set and share the results.

The teacher may direct students towards relevant attributes, or leave it entirely open for students to classify in any way they wish. (e.g. items b) d) and r) are all about Birthdays or 3) 7) 8) 9) all use cm.). Discussion and questioning are vital components at this stage.

Phase 5: Generation and Testing of Hypotheses

Categories formed may be classified and linked.

Can students think of other new data to use to fit into the categories formed?

Phase 6: Consolidation and conversion into skills

Students to use the concepts they have been forming. They may be able to find and create new items that belong to the different groups/ categories.

Can they define and or use these concepts?

Students apply the concepts or have practice using them. A Task or assignment is set that requires application of the concepts that have been explored. (e.g. Investigate why certain methods of traveling to school occur at this school. Which average is the "Best" to use? Conversions between numbers, percentages, fractions and ratios. Etc