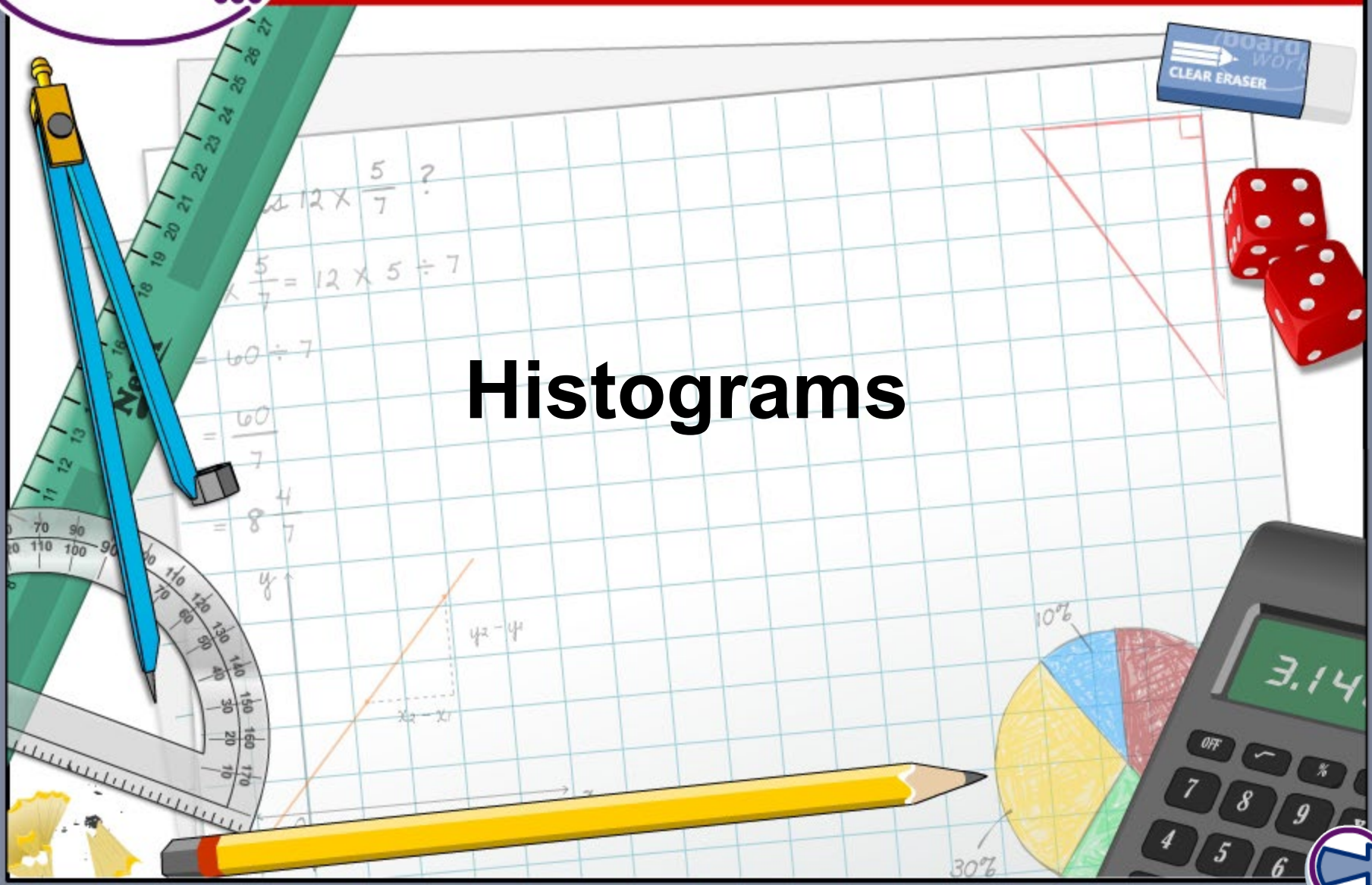
Histograms



Information

Common core icons

This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.

Slides containing examples of mathematical modeling are marked with this stamp.

This icon indicates an opportunity for discussion or group work.

The **Standards for Mathematical Practice** outlined in the Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

These are:

1) Make sense of problems and persevere in solving them.

2) Reason abstractly and quantitatively.

3) Construct viable arguments and critique the reasoning of others.

4) Model with mathematics.

5) Use appropriate tools strategically.

6) Attend to precision.

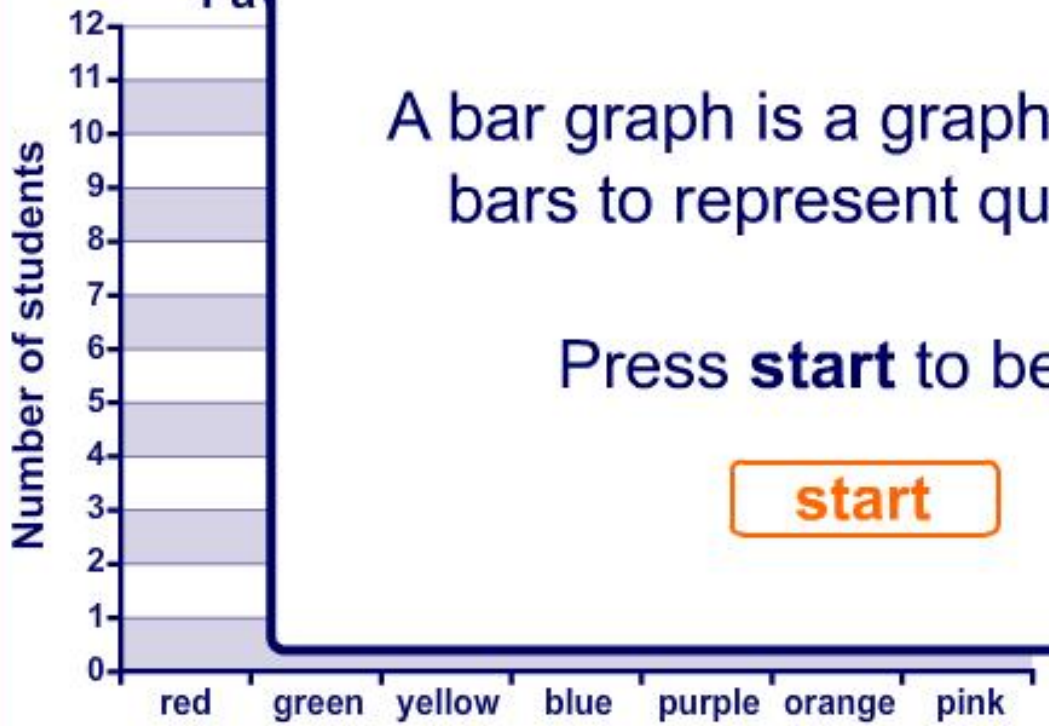
7) Look for and make use of structure.

8) Look for and express regularity in repeated reasoning.

This icon indicates that the slide contains activities created in Flash. These activities are not editable.

This icon indicates teacher's notes in the Notes field.

Bar graphs



A bar graph is a graph that uses bars to represent quantities.

Press **start** to begin.

start

Mr. Hill's
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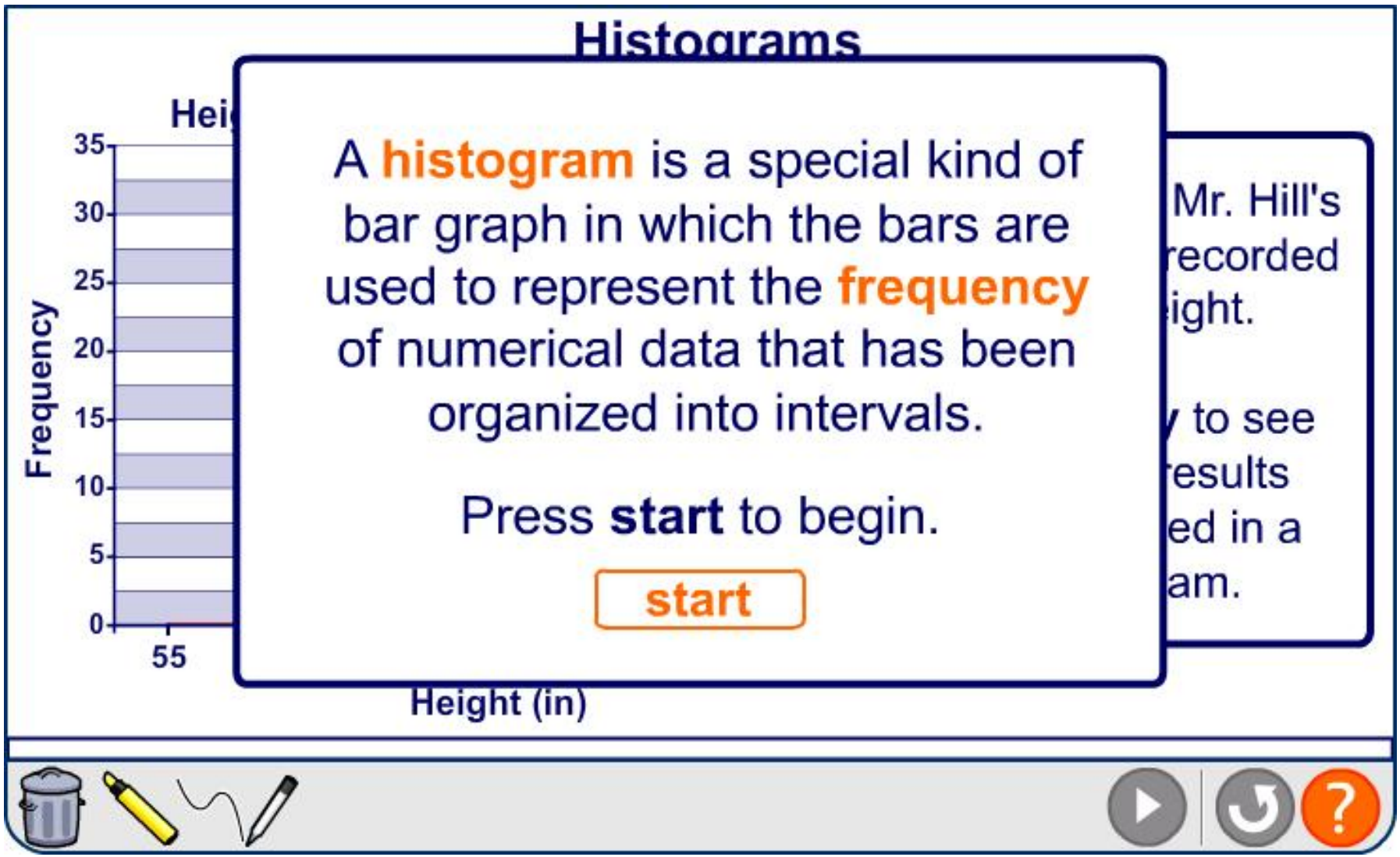
Introducing histograms



Histograms and bar graphs

Comparing bar graphs and histograms

bar graphs

histograms

How do histograms compare with bar graphs?

Press **start** to begin.

start

spaces between bars

S C

Making a histogram

Some sixth grade students have been training for a 200 m race. The results of their time trials are recorded below in seconds. Display this data in a histogram.

time trial results (seconds)							
34.5	32.7	33.1	30.2	33.1	32.6	34.9	32.8
35.8	32.2	32.2	34.1	34.4	33.5	33.9	34.0
34.9	33.3	33.6	34.2	31.5	31.4	31.9	35.2

Drawing histograms

Use the data in the table to complete the histogram showing the time students spent watching TV.

Time spent (hours and minutes)	Freq.
0 – 59 min	4
1 hr – 1hr 59 min	6
2 hr – 2 hr 59 min	8
3 hr – 3 hr 59 min	5
4 hr – 4 hr 59 min	3
5 hr – 5 hr 59 min	1

Heights of basketball players

The following data gives the heights of 30 high school basketball players in inches.

Create a frequency table and histogram for the heights of the basketball players.

height of basketball players (in)									
75	76	74	70	73	74	67	77	76	75
72	75	76	74	76	78	75	79	81	76
78	75	75	76	80	73	75	76	82	73

Line plots and dot plots

Press **start** to find out about
line plots and **dot plots**.

start

Dot plots

Mrs. Benson's singing lesson

During a singing lesson, Mrs. Benson recorded how long each of her students could sing a note before running out of breath. Construct a dot plot to display Mrs. Benson's data.

Press **start** to begin.

start

1 - 2

19-20

8 11 20 13 11 10 6 14