

Zoxy block language predicates

1-place predicates

Smiling(x): the shape of x's mouth is ☺

Laughing(x): the shape of x's mouth is 😄

Happy(x): the shape of x's mouth is ☺ or 😄

Neutral(x): the shape of x's mouth is —

Sad(x): the shape of x's mouth is ☹

Surprised(x): the shape of x's mouth is 😲

Angry(x): the shape of x's mouth is 😡

Frowning(x): the shape of x's eyes (and brows) is ☹

Winking(x): the shape of x's eyes is 👁

Crying(x): a tear is drawn under x's eye 👁

Red(x): x is red

White(x): x is white

Tall(x): x is taller than the standard block (which you get when you add an element)

Wide(x): x is wider than the standard block.

2-place predicates

LeftOf(x,y): x is to the left of y

RightOf(x,y): x is to the right of y

Above(x,y): x is above y

Below(x,y): x is below y

Adjacent(x,y): x is adjacent to y

WiderThan(x,y): x is wider than y

NarrowerThan(x,y): x is narrower than y

TallerThan(x,y): the height of x is larger than the height of y

ShorterThan(x,y): the height of x is smaller than the height of y

LargerThan(x,y): x is larger than y (which means that the area – height multiplied by width – of x is larger than the area of y)

SmallerThan(x,y): x is smaller than y (the area of x is smaller than y's)

SameSize(x,y): x is the same size as y (their areas are the same)

SameShape(x,y): x and y are the same shape (which means that the proportion between the height of x and its width is the same as the proportion between the height of y and its width).