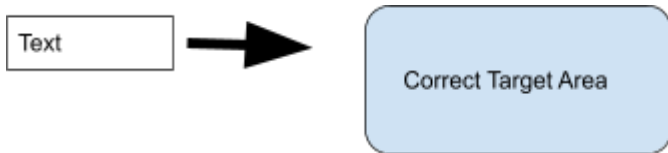To create a drag and drop activity with feedback

Basic operation required
User drags some text into a correct target area and receives feedback



Geogebra representation    See example at  https://www.geogebra.org/m/vwydwwnj

Text in a box
The box is a rectangle  (polygon) and the text can be the caption
eg.  the rectangle q1  is  q1 = Polygon (A, B, C, D).

Correct Target Area
It is also a rectangle (polygon)  q2 = Polygon (E, F, G, H)

Detection of text in box inside Correct Target Area
Use one corner of the text in box ie, left corner say is D.

Use the boolean variable (which gives value true or false)
text1inzone1 = IsInRegion(D,q2) .
text1inzone1 will be true if  D is inside q2
text1inzone 1 will be false if D is outside of q2

The text "Text object in in target zone has its "Condition to Show Object" as the variable text1inzone1
So when the text box with corner D (bottom left) is inside Target Zone (q2),  text1inzone1 is true
and the text appears
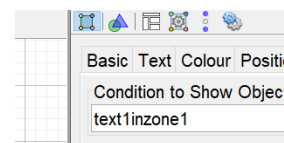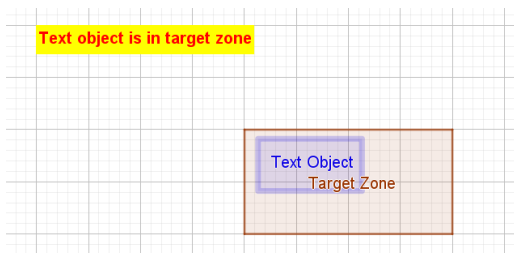


**If you have ten labels and ten target zones, create ten pairs of the above**

Other examples

1.    Using IsInRegion to create Hotspots

Hotspot Design

Example of Hotspot Design

1. Use of IsInRegion[Object,Closed Region]
   Closed regions include poly, circles, circular sector
   objects. The object is point $K_p$ (following blue arrow)
2. For each hotspot use a boolean variable(named)
   with part 1 above for easy reference and deployment
3. For creating hotspot to circle, use concentric circles
   enclosing the original circumference
   ($c_i$ and $c_o$ surrounding c)

Drag the blue arrow to various parts
of the diagram to see the descriptions
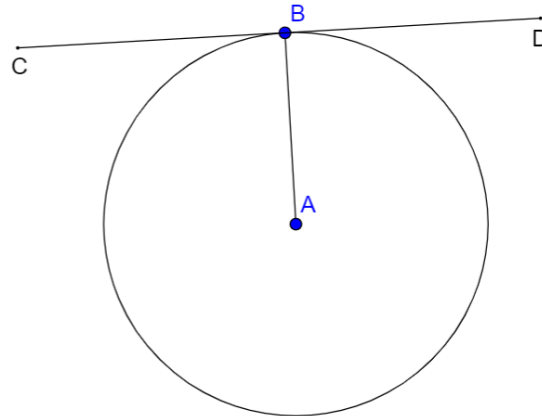
$i_w = 0.03$     $i_h = 0.06$

Note :
$i_w$ and $i_h$ are for resizing the arrow pointer

2.    Matching Pair Quiz Template

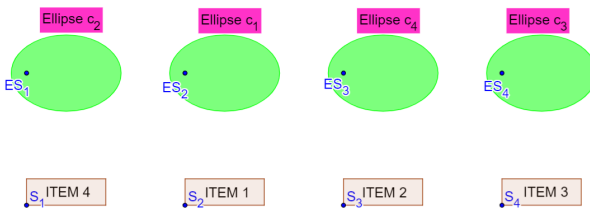Internally set item i to ellipse ci.
Shuffle items and ellipses on RESET
Internal checkij for item i's corners j = 1 to 4, inside region ci
Done - feedback for each region ci

New Question   Check Answer   RESET

Your score now : 0

Ellipse $c_2$      Ellipse $c_1$      Ellipse $c_4$      Ellipse $c_3$

$ES_1$            $ES_2$            $ES_3$            $ES_4$

$S_1$ ITEM 4      $S_2$ ITEM 1      $S_3$ ITEM 2      $S_4$ ITEM 3

set up shuffle P1 to P4 (initial only)     Set up Shuffle Ellipses (initial )     ✓ Show Location Pts n Other

Parts of a circle

**Start Quiz**   **RESET**

**Name of Part of Circle shown :**

Drag answer into this box
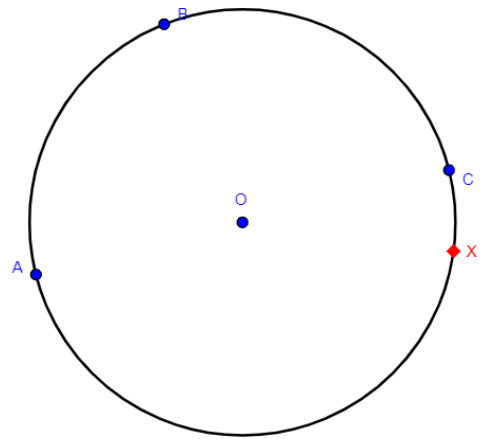
| radius | minor arc |
| diameter | major arc |
| chord | minor sector |
| tangent | major sector |
| semi circle | minor segment |
| | major segment |