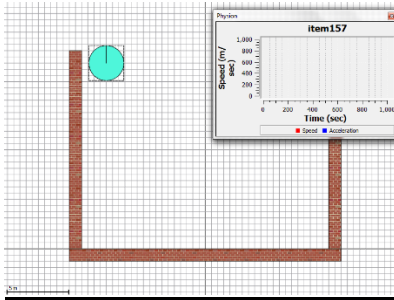
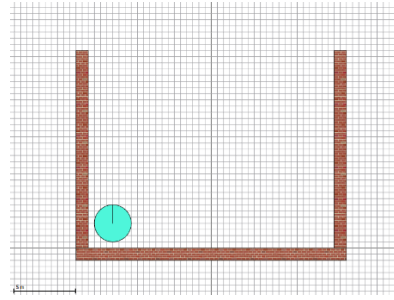


Physics – Basic Walkthroughs

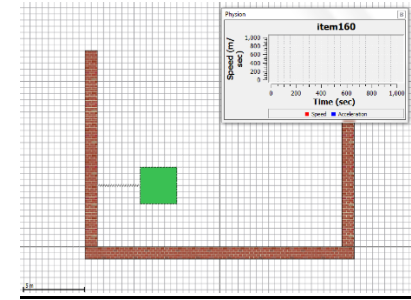
Task 1: Object falls



Task 2: Object as projectile



Task 3: Object for SHM



Select Circle menu item

- position cursor, click and hold, drag to create circle

Property Editor → Physics Item → Name: input name for physics item "circle"

Property Editor → Body → X: enter -8.000

Property Editor → Body → Y: enter 15.000

Property Editor → Circle → Radius: enter 1.500

Graph menu item

- click "circle"

- position menu as desired

Play menu item

Pause menu item

Back arrow menu item

Saving

File → Save Scene: enter name "walkthrough" (file type .scene)

Property Editor → Body → Y: enter 2.000

Shoot menu item

- click and hold, drag to have arrow point in desired direction

Play menu item

Back arrow menu item

Remove menu item

- click on "circle"

Select Square menu item

- position cursor, click and hold, drag to create square

Property Editor → Physics Item → Name: input name for physics item "square"

Property Editor → Body → X: enter -5.000

Property Editor → Body → Y: enter 5.000

Property Editor → Rectangle → Width: enter 3.000

Property Editor → Rectangle → Height: enter 3.000

Create Spring menu item

- position cursor, click and hold, drag to connect wall to box

- Damping menu item: 0.00

Scene properties → Physics World → Gravity → Y: enter 0.00

Graph menu item

- click "square"

- position menu as desired

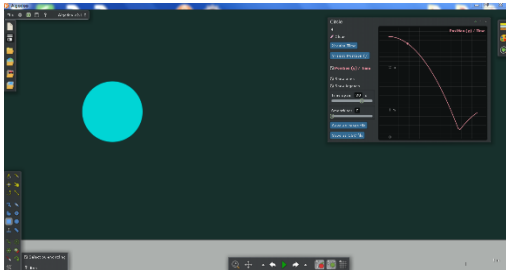
Shoot menu item

- click and hold, drag to have arrow point in desired direction

Algodoo – Basic Walkthroughs

Play menu item

Task 1: Circle falls



File menu → New scene → Chalkboard

Circle tool menu item

- position cursor, click and hold, drag to increase size

Right click → Edit → Geometry actions → Transform into a circle

Right click → Edit → Appearance → select colour

Move tool menu item

- click and hold, drag circle to position in window

Right click → Edit → Show plot tool → Y axis → position (Y)

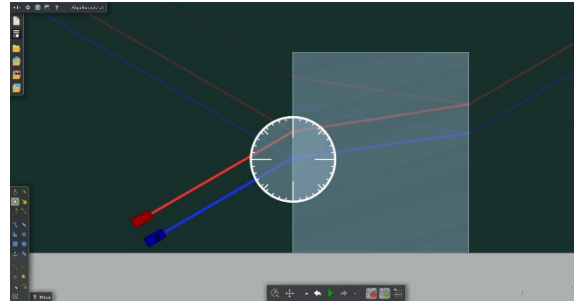
Play bottom menu item

Pause bottom menu item

Saving

File → Save Scene: enter name "pulley" (file type Algodoo scene package)

Task 2: Refraction



Right click → Erase circle

Rectangle tool menu item

- position cursor, click and hold, drag to desired size

Scale to menu item → click and hold, drag to reduce width of rectangle

Material menu item → glass

Right click → Edit → Material → Refractive Index: enter/slide to change value

Laser pen tool menu item

- position laser pen

Right click → Edit → Appearance → select colour: blue

Right click → Edit → Clone

Right click → Edit → Appearance → select colour: red

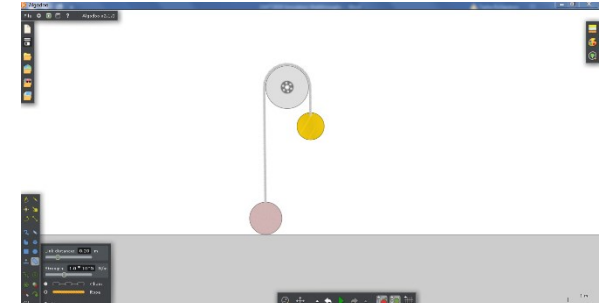
Circle tool menu item

- position cursor, click and hold, drag to desired size

Appearance menu item → Protractor

Material menu item → Refractive index: enter/slide 0

Task 3: Pulleys



File menu → New scene → Light grey

Circle tool menu item

- position cursor, hold down shift key, click and hold, drag to increase size

Right click → Edit → Clone

Right click → Edit → Clone

Move tool menu item

- select circle, drag and drop to position

Axel tool menu item

- click circle

Left click circle (1)

Material menu item → gold

Left click free circle (2)

Material menu item → wood

Chain tool → rope

- click and hold, connect two free circles to one another over axel

Play bottom menu item

Pause bottom menu item