

Name: _____

3D PRINTING PARAMETERS

Temperature

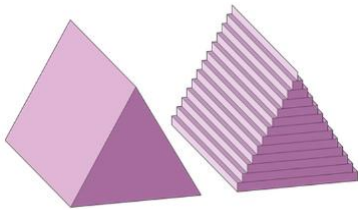
Print temperature: temperature at which the filament is heated _____

Bed temperature: improves adhesion to the bed but is not always available _____

Cooling: cools material before the next layer is placed _____

Quality

Layer height: is the thickness of one printed layer. A thinner layer height increases the quality of the print making the surface smoother



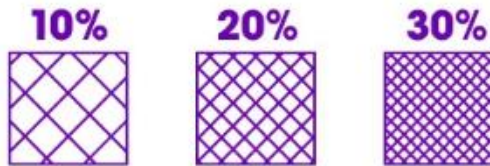
RETRACTION: the feeder pulls back the filament when the printer is going to travel without printing in order to avoid threads of plastic that worsens the result: _____, how fast retraction occurs, _____, how much plastic is pulled.

Shell (outside of the print)

Shell thickness: defines the thickness of the outside walls _____

Infill (inside of the print)

Infill density: defines the amount of plastic used on the inside of the print. From _____ is enough in most cases. Densities from _____ when higher resistance is required.



Infill pattern: _____

Speed

Infill speed: does not affect visual quality

Wall speed: the speed for outer and inner wall can be set separately. The printing speed of the outer wall determines the surface quality of the piece _____

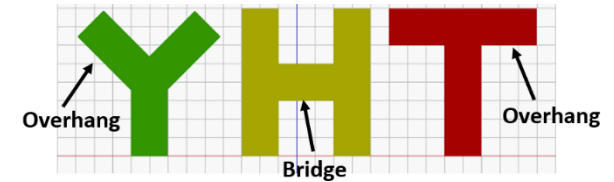
First layer speed: lower speed recommended

Support speed: quality is not important, so higher speeds are used.

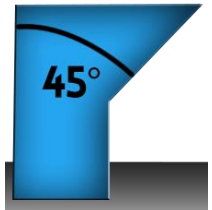
Travel speed: the speed when the printer is not extruding plastic _____

Structures

OVERHANG: part of a print that extends outward beyond the previous layer.



Overhang angle: maximum overhang angle printed without supports _____



Supports: are necessary for models with overhanging parts to prevent plastic from falling.

Supports pattern: grid, lines...

Platform adhesion.

- **Skirt:** surrounds the piece without touching it. Ensures a smooth flow of plastic.

- **Brim:** like a skirt but attached to the edges of the model. Is used to hold down the edges.

- **Raft:** kind of platform located underneath the model to improve adhesion and stabilize the model.

