

ACTIVITÉ

-CONSTRUCTIONS EN TROIS DIMENSIONS-

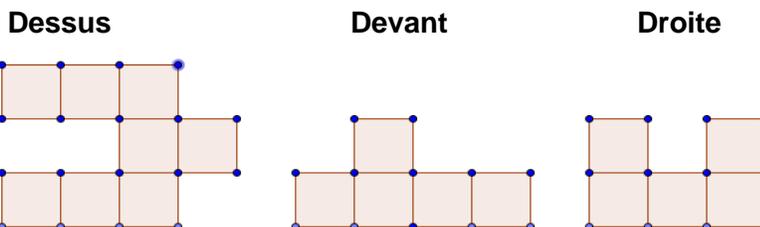


Objectif: construire le solide dont les différentes vues sont données. Trouver ensuite le nombre minimal et le nombre maximal de cubes nécessaires pour construire le solide.

Matériel :

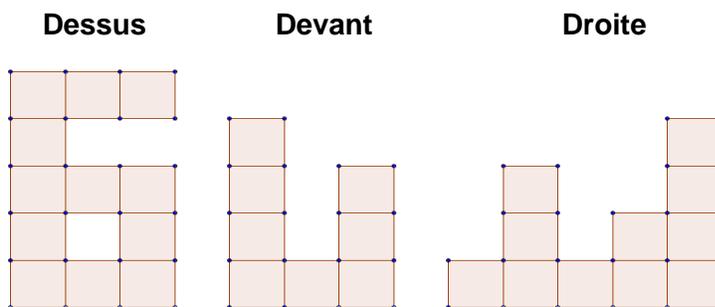
- Une boîte de blocs multibases ou des petits blocs lego
- Fiche d'activité
- Crayon
- Papier quadrillé

Figure 1 :



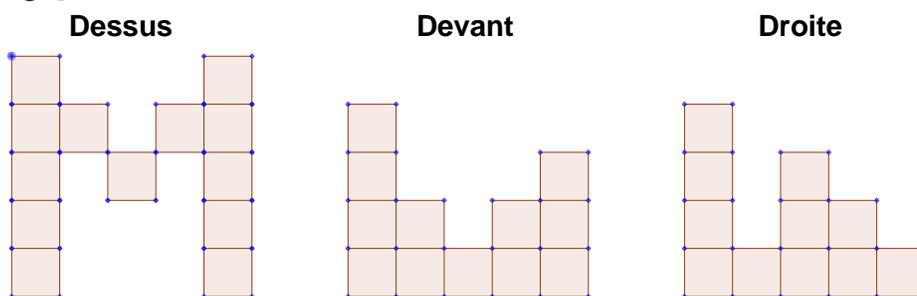
Nombre de cubes (une seule solution possible) : _____

Figure 2 :



Nombre minimal : _____ Nombre maximal : _____

Figure 3 :

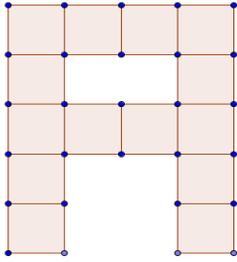


Nombre minimal : _____ Nombre maximal : _____

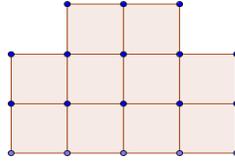


Figure 4 :

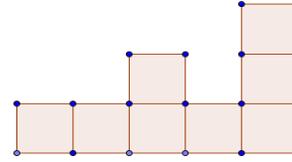
Dessus



Devant



Droite

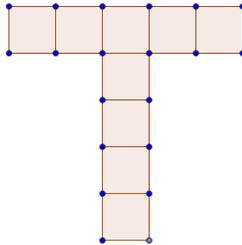


Nombre minimal : _____

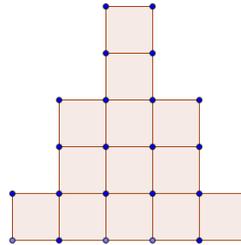
Nombre maximal : _____

Figure 5 :

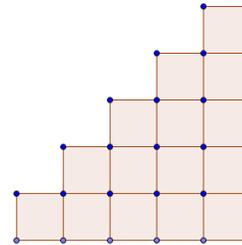
Dessus



Devant



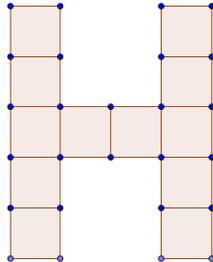
Droite



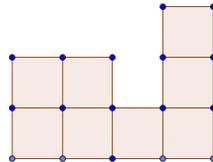
Nombre de cubes (une seule solution possible) : _____

Figure 6 :

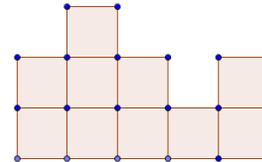
Dessus



Devant



Droite

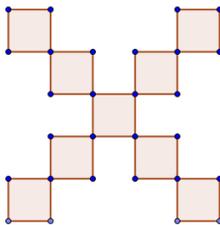


Nombre minimal : _____

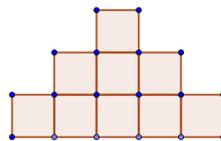
Nombre maximal : _____

Figure 7 :

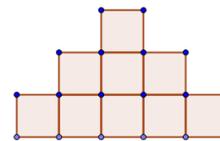
Dessus



Devant



Droite



Nombre minimal : _____

Nombre maximal : _____



Voici les solutions :

Figure 1

Solution unique

Nombre de blocs : 10

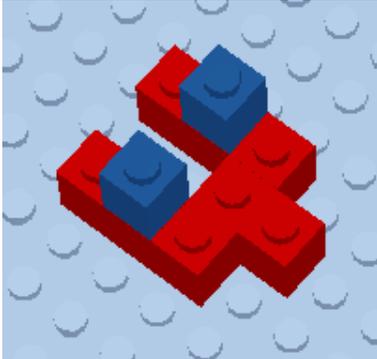
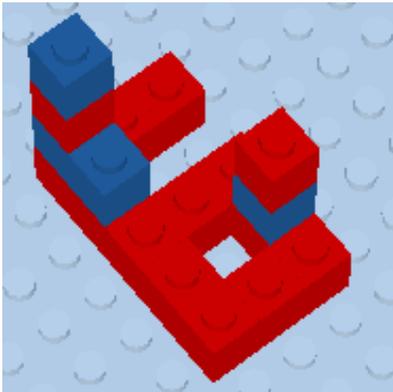


Figure 2

Plusieurs solutions possibles

Nombre de blocs minimal : 18



Nombre de blocs maximal : 22

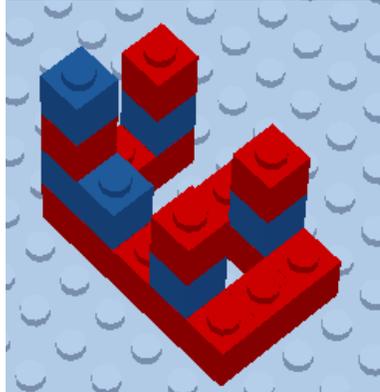
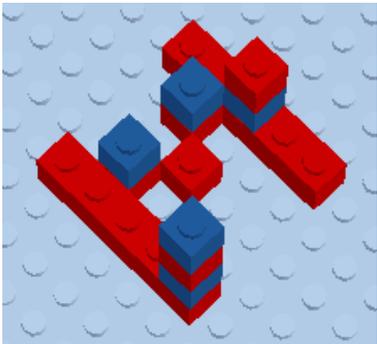


Figure 3

Plusieurs solutions possibles

Nombre de blocs minimal : 20



Nombre de blocs maximal : 26

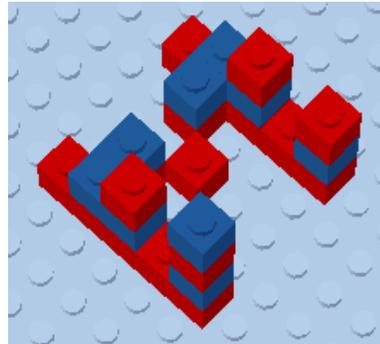
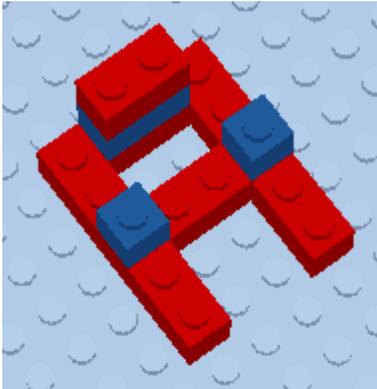




Figure 4

Plusieurs solutions possibles

Nombre de blocs minimal : 20



Nombre de blocs maximal : 24

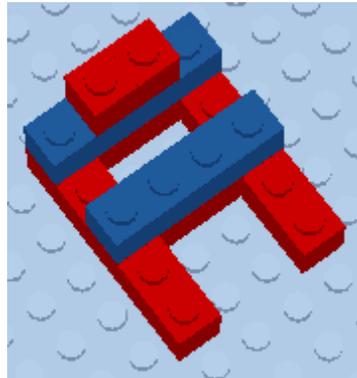


Figure 5

Solution unique

Nombre de blocs : 23

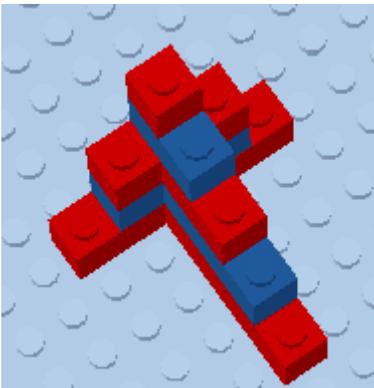
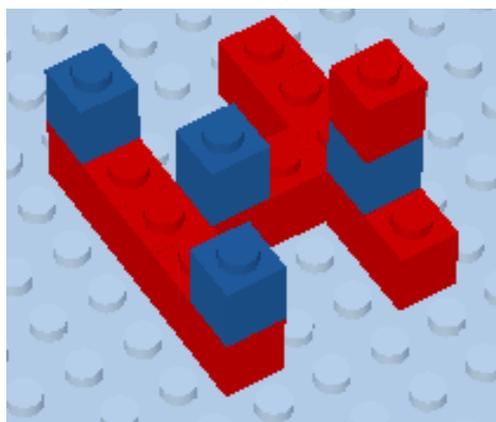


Figure 6

Plusieurs solutions possibles

Nombre de blocs minimal: 17



Nombre de blocs maximal : 22

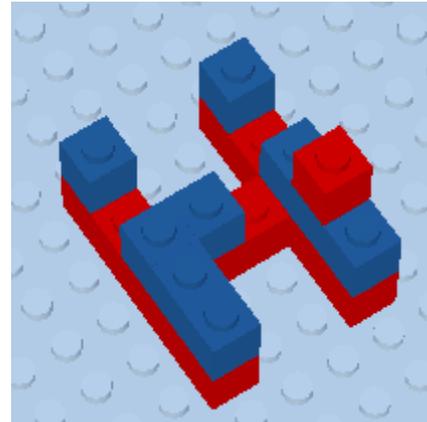
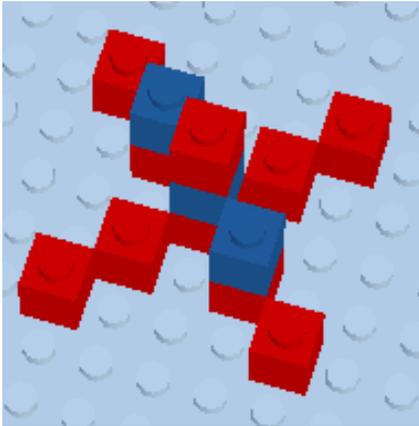




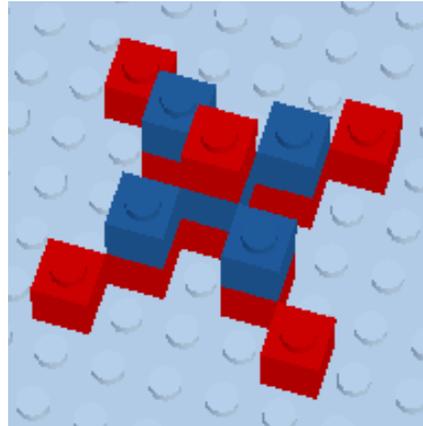
Figure 7

Plusieurs solutions possibles

Nombre de blocs minimal : 13



Nombre de blocs maximal : 15



Note : Les figures sont construites avec www.buildwithchrome.com.