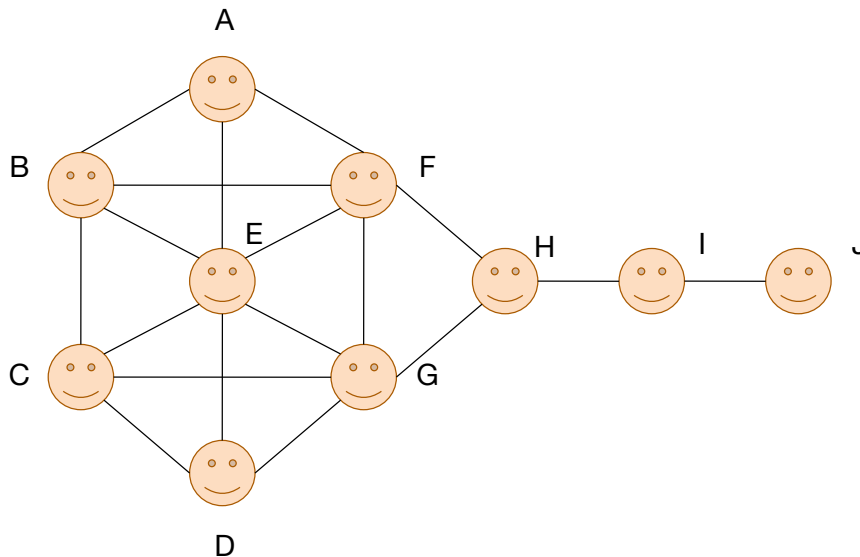


# Life-saving maths: How does vaccination work?



## Investigating Networks

Who is the key person in this network?



Depending on how I analyse the network, I think I can claim that the key person is:

- (a) E
- (b) H
- (c) F or G

Do you agree with any of these?

These are the methods I used to analyse the network:

- (x) degree centrality - who has the most direct links to other people (to find this, I worked out the number of direct links for each person, their *degree* in the network)
- (y) closeness centrality - who is closest to everyone else, who can access everyone else in the network most easily (to find this, I tabulated the length of the shortest path between each pair of people)
- (z) betweenness centrality - who is on most shortest paths between people, so is most important in linking other people to each other (to find this, I recorded the individuals on the shortest path between each pair of people)

Which is closest to your method?

Which method gives which result?

### Life-saving maths: Investigating Networks

<http://motivate.maths.org/content/MathsHealth/Vaccination>

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