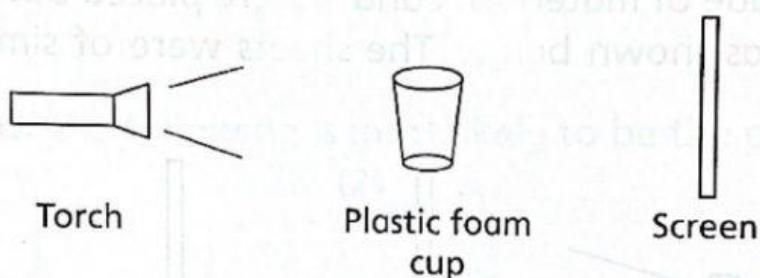


28. Which statement about materials X and Y is likely possible if the following shadow was formed on the screen?

(1) X and Y allow most light to pass through them. (S)
(2) X and Y allow some or no light to pass through them.
(3) X allows most light to pass through it and Y allows some light to pass through it.
(4) X allows some light to pass through it and Y does not allow light to pass through it. ()

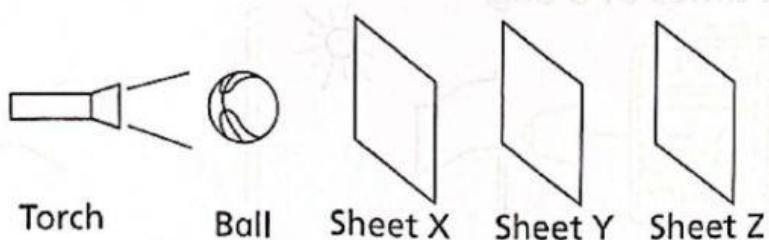
29. A torch was shone on a plastic foam cup as shown below.



Which shows the unlikely shadow formed for the respective position of the cup?

	Position of cup	Shadow formed
(1)		
(2)		
(3)		
(4)		

Study the following diagram and answer questions 30 to 32.



30. Which statement is correct if a dark shadow of the ball is formed on sheet Y?

- (1) Sheet Y allows light to pass through it.
- (2) Sheet Z does not allow light to pass through it.
- (3) Sheet Y does not allow light to pass through it.
- (4) Sheet X does not allow light to pass through it. ()

31. Which of the following is/are correct if a dark shadow of the ball is formed on sheet Z?

- A Sheet X allows most light to pass through it.
- B Sheet Y allows most light to pass through it.
- C Sheet Z allows some light to pass through it.
- D Sheet Z allows most light to pass through it.

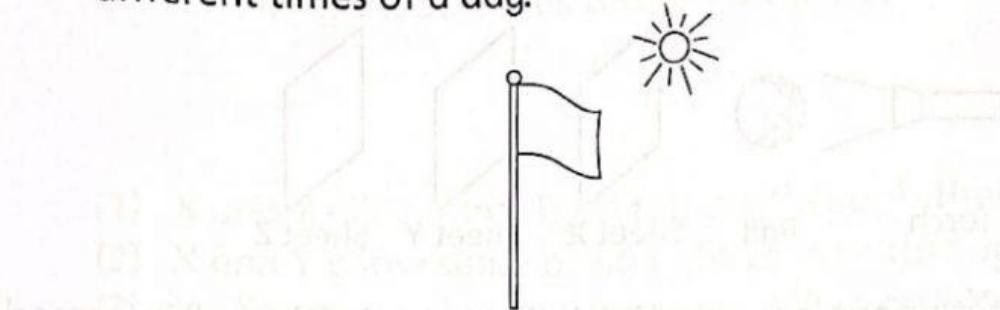
- (1) A only (2) C only
- (3) A and B only (4) C and D only ()

32. If the following shadow is formed on sheet Z, what could sheets X and Y be made of?



Material of sheet X	Material of sheet Y
Clear glass	Clear glass
Tracing paper	Clear glass
Tracing paper	Metal
Clear glass	Metal

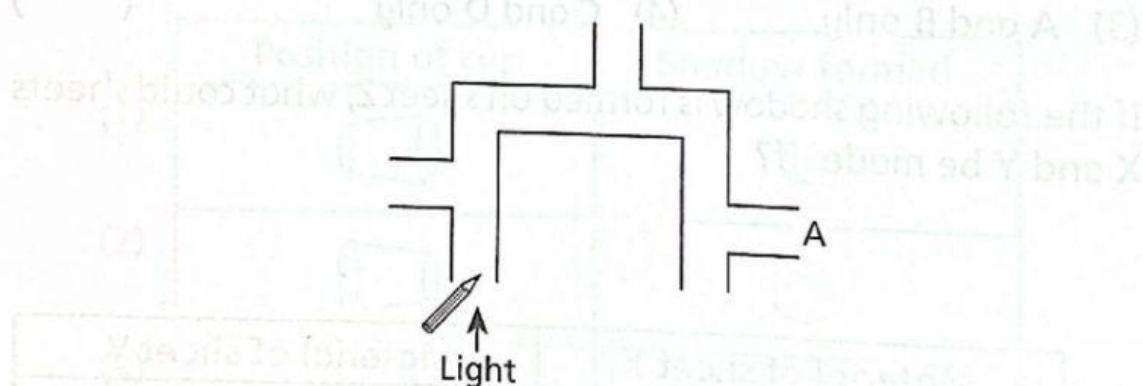
33. The length of the shadow of a flag pole was measured at different times of a day.



Which shows the correct lengths of the shadows at different times of the day?

Length of shadows (cm)			
8.00 am	Noon	2.00 pm	4.00 pm
10	20	30	40
20	40	20	10
40	20	10	40
40	10	20	40

34. The diagram below shows some connecting pipes.



What is the least number of mirrors which need(s) to be placed inside the pipes so that the pencil can be seen when Kaixin places her eye at position A?