The Birthdate Game

Enlarge the A-B-C-D cards from below. Display them on the board and let the students study them. Have them identify which cards have their birthdate on them (the date on which they were born, e.g., 10th, 30th, etc.).

Tell them you can magically identify which of those numbers is their birthdate.

After a few tries, tell them you know they know you are not magic, so there must be some logical way to figure out how you know all their birthdates. Remind them to look for patterns and use number sense to solve the mystery.

Here's the secret:

Add the first numbers of the cards they said their birthdate was on.

For example: If they said their birthdate was on Cards A and B, then you would add 1 (the first number on Card A), and 2 (the first number on B)—showing that their birthdate is the 3rd.

Card A		Card B		Card C		Card D		Card E	
1	17	2	18	4	20	8	24	16	24
3	19	3	19	5	21	9	25	17	25
5	21	6	22	6	22	10	26	18	26
7	23	7	23	7	23	11	27	19	27
9	25	10	26	12	28	12	28	20	28
11	27	11	27	13	29	13	29	21	29
13	29	14	30	14	30	14	30	22	30
15	31	15	31	15	31	15	31	23	31