SPECIAL April 2020 – PUZZLES Number 10

Originally written to celebrate the Sixteenth Anniversary of Sunday Night Trivia in Hoppers Crossing - June 2019

1.

I've Got Your Number

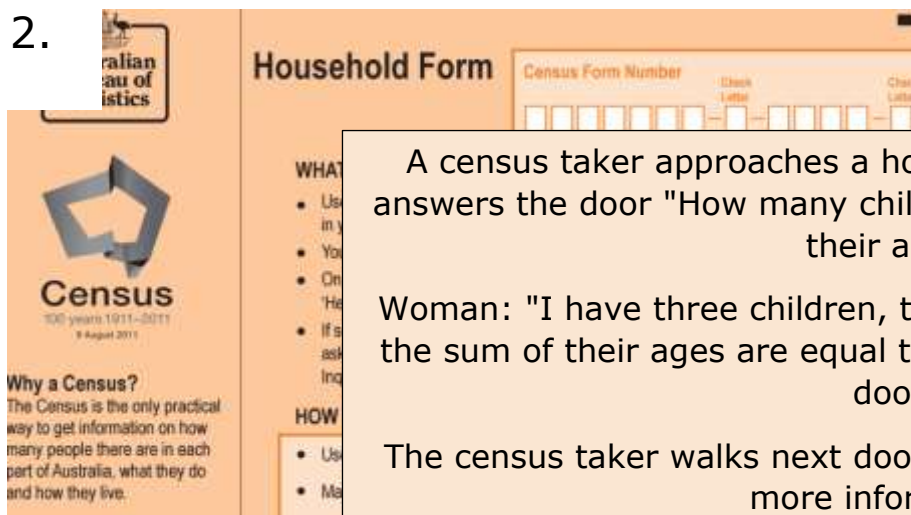I am thinking of a whole number between 1 and 20, inclusive.

- If my number is even, then it is also a multiple of 3.
- If my number is not a multiple of 3, then it is greater than the length of the diagonal of a square with an area of 81.
- If my number is not greater than the length of the diagonal of a square with an area of 81, then it is square.
- If my number is not square, then it is one greater than a multiple of 5.

What is my number?

You might find this useful for working out purposes

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

2.

Household Form

Census Form Number

Australian Bureau of Statistics

Census 100 years 1911–2011 9 August 2011

Why a Census?
The Census is the only practical way to get information on how many people there are in each part of Australia, what they do and how they live.

A census taker approaches a house and asks the woman who answers the door "How many children do you have, and what are their ages?"

Woman: "I have three children, the product of their ages are 36, the sum of their ages are equal to the address of the house next door."

The census taker walks next door, comes back and says "I need more information."

The woman replies "I have to go, my oldest child is sleeping upstairs."

Census taker: "Thank you, I now have everything I need."

What are the ages of each of the three children?

(Assume all ages are exact whole numbers)

3.

CROSSWORD CLUES (1)

(a) *Closed sac* _ **Y S** _

(b) *Unicellular fungus* **Y** _ _ **S** _

(c) *Person of Romany origins* _ **Y** _ **S** _

(d) *Chasm* _ _ **Y** _ **S**

(e) *Assignation* _ _ **Y S** _

(f) *Esoteric, magic, supernatural* _ **Y S** _ _ _

(g) *Bivalve mollusc* _ **Y S** _ _ _

(h) *Ancient writing implement* _ _ **Y** _ _ **S**

(i) *Mineral calcium sulfate* _ **Y** _ **S** _ _

(j) *Crooked lawyer* _ _ **Y S** _ _ _

BONUS: *American Indian's pony* _ _ **Y** _ **S** _

4.

What Links these pictures?

5.

Pencils and Jars

I have some pencils and some jars.
If I put 4 pencils into each jar I will have one **jar** left over.
If I put 3 pencils into each jar I will have one **pencil** left over.
How many pencils and how many jars?

6. Word Chain

Change WARM to COOL in **five** steps, creating a real new word each time with one letter different to the previous word.

Example: CAT to DOG in three steps: CAT, COT, DOT, DOG

WARM, _ _ _ _ , _ _ _ _ , _ _ _ _ , _ _ _ _ , COOL

Write the four intermediate words.

7. How Many Arms?

What is the probability that the next person you meet has an above average number of arms? Is it: Impossible; Unlikely; Likely; Very Likely or Certain?

8. CROSSWORD CLUES (2)

(a) *Church seat*   **P _ W**

(b) *Bowsprit*   **P _ _ W**

(c) *Lever which engages with the teeth of a ratchet wheel*   **P _ W _**

(d) *Deposit goods as security for a loan*   **P _ W _**

(e) *Crustacean*   **P _ _ W _**

(f) *Roam stealthily*   **P _ _ W _**

(g) *Engender*   **_ P _ W _**

(h) *Fruit related to custard apple*   **_ _ _ P _ W**

(i) *Tin-based alloy*   **P _ W _ _ _**

(j) *Loll, slump, flop*   **_ P _ _ W _**

BONUS: *Unbearably intense*   **_ _ _ _ P _ W _ _ _ _ _**

9. More Pencils and Jars

I have some pencils and some jars
If I put 9 pencils into each jar I will have two **jars** left over
If I put 6 pencils into each jar I will have three **pencils** left over
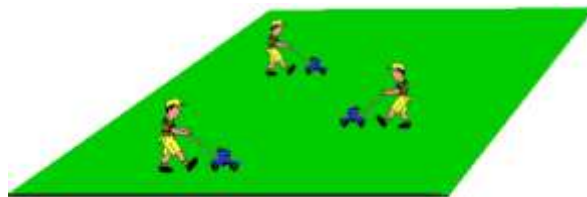How many pencils and how many jars?

10. Fruit & Veg

In each of the following, find the hidden fruit or vegetable

e.g THE ENDS OF THE RO**PE AR**E TIED IN A KNOT = PEAR

a. IT MAY BE ANYTHING

b. A SUNSPOT ATOM

c. PASS THE SOAP PLEASE

d. ERIC HARDLY HAD TIME TO RECOVER

e. THAT'S AL'S IF YOU WANT TO BORROW IT

f. BEFORE YOU GO ON, I ONLY CAME TO APOLOGISE

11. The Lazy Lawnmower

Alec, Bill and Charlie each work for a lawn-mowing concession.

Alec and Charlie are equally energetic, so that if they are hired individually to mow a certain sports ground, it will take each of them four hours, but will only take two hours if they work together.

Charlie is a bit lazy. If he is used as the third mower to mow the sports ground simultaneously the job time is reduced again, but only to one and a half hours.

Assuming Charlie works at a steady pace, how long would it take him to mow the sports ground on his own?

12. When Were They Born? (1)

The left hand column contains Australian male film actors in alphabetical order.
The right hand column is a list of their birth years from longest ago to most recent.

Link each actor to his correct birth year in the form a1, b2 etc.

a	Bryan Brown		1	1947
b	Eric Bana		2	1951
c	Russell Crowe		3	1957
d	Guy Pearce		4	1960
e	Geoffrey Rush		5	1964
f	Gary Sweet		6	1965
g	Hugo Weaving		7	1967
h	David Wenham		8	1968

13.

Census

100 years.1911–2011

9 August 2011

Why a Census?
The Census is the only practical way to get information on how many people there are in each part of Australia, what they do and how they live.

A census caller knocks on the door. A man answers.
The conversation goes as follows.

CENSUS TAKER: Good Evening sir, may I ask who lives here?

MAN: Myself and my three daughters.

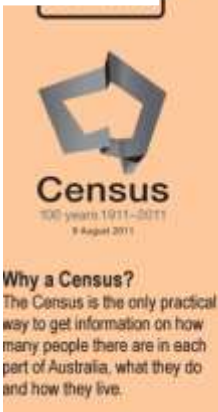CENSUS TAKER: And how old are your daughters?

MAN: The product of their ages is 72, and the sum of their ages is my house number.

CENSUS TAKER: I'm sorry, that's insufficient information.

MAN: My eldest daughter really likes chocolate.

CENSUS TAKER: Thank you.

How old are the three daughters, and what is the house number?
(Assume all ages are exact whole numbers)

14. TV Anagrams

Decipher each anagram (in capitals) to find the name of a US series in each case

(a) This sitcom centered on a group of six with bright **RED FINS**.

(b) In the pilot episode the body of Laura Palmer was found in a vat of **PINK WASTE**.

(c) This police drama series got sexier after they realized, "If anything will bring in the viewers, **IT'LL BE SHEER LUST**."

(d) Ed Asner starred in this series for many years; when it ended, he said he was glad to finally be out of **A LONG RUT**.

(e) In this sitcom Alex had to ask himself "is it me the girls like, or **IS IT MY FLEA**?"

15. CROSSWORD CLUES (3)

(a) *Sicken with an excess of sweetness* **CL _ _**

(b) *An extension to a shoe or horseshoe to prevent slipping* **C _ L _**

(c) *Oxide residue or ash left after burning a metal* **C _ L _**

(d) *Lowest point of a ridge: mountain pass* **C _ _ L**

(e) *T-shaped object on a boat for attaching ropes* **C L _ _ _**

(f) *Protective layer of sepals at the base of a flower* **C _ L _ _**

(g) *Waterproof sealant* **C _ _ L _**

(h) *Conspiratorial group of plotters or intriguers* **C _ _ _ L**

(i) *Great brilliance: conspicuous success (French)* **_ C L _ _**

(j) *Relating to the countryside* **_ _ C _ L _ _**

BONUS: *Doctor's probe; OR optical mirror surface* **_ _ _ C _ L _ _**

16. CARDS for CANDY

Two ladies played cards for lollies; the winner took one lolly per game from the loser.

When it was time to pack up, one lady had won three games, while the other lady had won three new lollies.

How many individual games had they played?

17. Put it There …

At a business meeting each person shook hands with each other person exactly once.
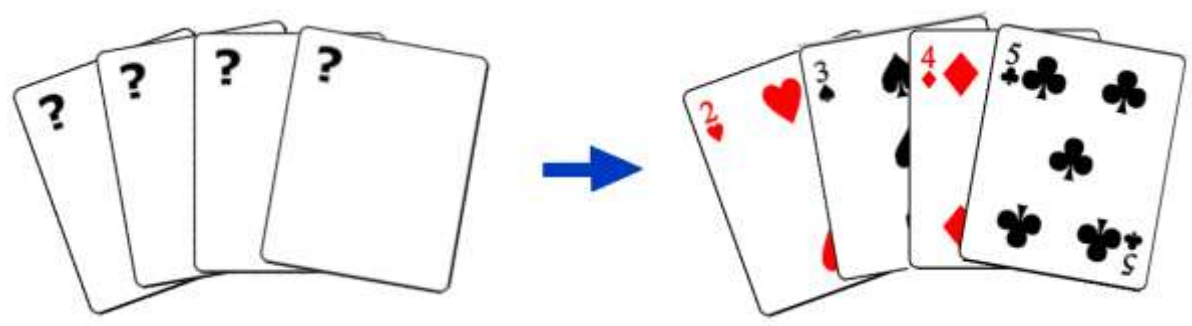
There were fifteen handshakes

How many people attended the meeting?

18.   *It's In the Cards ....*

(a) A man has four cards in his hand facing him.

He wants them placed in ascending order 2 to 5 from his left to his right (or, first to last). To do this, he takes the leftmost card and puts it last. He then takes the third card from the right and puts it in last place.

What was the previous order of the cards, left to right?

(b)   If you take a deck of 52 playing cards;
Shuffle them;
Deal them to yourself one at a time;
What is the least number of cards that must be dealt in order to be certain of getting at least one four-of-a-kind?

(c)   If you then take two decks of 52 playing cards each;
Combine them;
Shuffle them;
Deal them to yourself one at a time;
What is the least number of cards that must be dealt in order to be certain of getting at least one four-of-a-kind?

19.   Word Match

For each line of the table below, select the closest of the five synonyms to the word in the left-hand column.

a	**PROTESTOR**	rebel	dissenter	demonstrator	marcher	speaker
b	**INVOLVEMENT**	participation	concern	responsibility	implication	association
c	**HERMIT**	solitaire	recluse	monk	loner	hoarder
d	**HASSLE**	problem	nuisance	worry	bother	trouble
e	**FICTIONAL**	legendary	invention	informal	genuine	imaginary
f	**FASCINATE**	catch	charm	captivate	occupy	win
g	**THRIVING**	fit	strong	wholesome	flourishing	nourishing
h	**CONFIDE**	entrust	limit	secret	disclose	speak

20. **When Were They Born?** (2)

The left hand column contains Australian female actors in alphabetical order.
The right hand column is a list of their birth years, from longest ago to most recent.

Link each actor to her correct birth year in the form a1, b2 etc.

a	Cate Blanchett	1	1947
b	Toni Collette	2	1955
c	Judy Davis	3	1967
d	Portia de Rossi	4	1968
e	Nicole Kidman	5	1969
f	Lisa McCune	6	1971
g	Naomi Watts	7	1972
h	Jackie Weaver	8	1973

ANSWERS:

1. 9

2. The three children's ages are 9, 2 and 2 (in any order)

3. a. cyst   b. yeast   c. Gypsy   d. abyss   e. tryst   f. mystic   g. oyster
h. stylus   i. gypsum   j. shyster   BONUS (2 points) - CAYUSE

4. All make a new word when you add the word "fish"
(Angelfish, jellyfish, monkfish, swordfish)

5. 16 pencils and 5 jars

6. **WARM, WORM, WORD, WOOD, WOOL, COOL** (other correct answers
might be possible)

7. Very likely!
Reasoning:
Almost everybody in a normal human population has two arms.
There are probably no people with more than two arms
There are likely to be a very small number of people with one or no arms
for whatever reason.
Therefore, the average number of arms in a normal human population is
very slightly less than two.
It's very likely that the next person you meet will have two arms.

8. a. pew   b. prow   c. pawl   d. pawn   e. prawn f. prowl   g. spawn
h. pawpaw   i. pewter   j. sprawl   BONUS: overpowering

9. 45 pencils   7 jars

10. a. bean   b. potato   c. apple   d. chard   e. salsify   f. onion

11. Six hours

12. a 1,   b 8,   c 5,   d 7,   e 2,   f 3,   g 4,   h 6

13. The daughter's ages are 8, 3 and 3 and the house number is 14
The key lies in the fact that the census taker would already know the house
number, so if he still doesn't know the girl's ages after working out the three
possible factors of 72 that add up to the house number, it must be because
there's more than one possibility.

The only factors of 72 that have the same sum are 2 X 6 X 6 and 3 X 3 X 8 .
The sum in each case is 14. Once the census taker knows that there is one
eldest daughter (not twins), the correct ages must be 3, 3 and 8.

14. (a) Friends;   (b) Twin Peaks; (c) Hill Street Blues; (d) Lou Grant;
(e) Family Ties

15. a. cloy   b. calk   c. calx   d. coll   e. cleat f. calyx   g. caulk   h. cabal
i. eclat   j. bucolic   Bonus: SPECULUM

16. 9 games

17. Six people

18. a. (In strict order) 4,2,5,3   b. 40 cards   c. 40 cards

Note that the answer 40 would be correct for <u>any number</u> of decks.

19. a. dissenter   b. participation   c. recluse   d. bother   e. imaginary
       f. captivate   g. flourishing   h. entrust

20. a 5,   b 7,   c 2,   d 8,   e 3,   f 6,   g 4,   h 1