Study 1: human memory

- Protocol:
  - Several lists of words will be presented (lists will be presented at different rates)
  - After each list is presented, you will be told to either RECALL all the words that you can from the list or do some simple arithmetic problems. Each math/recall sheet will be labeled A or B. The instruction will say:
    - RECALL if A  MATH if B or
    - MATH if A  RECALL if B
  - After an interval for RECALL or MATH, you will be shown another list …
  - After all lists are finished, there will be some more math followed by a recognition task.

Study 1

- When asked to recall, you should write down the last few items first, and then recall as many others as you can.
- Write down words that you are reasonably sure were on the list (don’t guess).
- After finishing a page, do not go back to prior lists.
- Do not look ahead.
- Please turn the pages when told to do so.
- Are there any questions?
- Does everyone have a pencil/pen

Study 1

- Get ready to begin

List 1

mad

fear
<table>
<thead>
<tr>
<th>happy</th>
<th>fight</th>
</tr>
</thead>
<tbody>
<tr>
<td>hatred</td>
<td>mean</td>
</tr>
<tr>
<td>calm</td>
<td>emotion</td>
</tr>
</tbody>
</table>
enrage

RECALL if A
MATH if B

GET READY
5

GET READY
4

GET READY
3

GET READY
2
GET READY

1

List 2

white
dark

cat
charred
ink  

bottom

cal

brown

gray

MATH if A
RECALL if B
GET READY 5

GET READY 4

GET READY 3

GET READY 2

GET READY 1

List 3
wine

loaf

toast

MATH if A
RECALL if B

GET READY
5

GET READY
4
GET READY 3

GET READY 2

GET READY 1

List 4

table

sit
legs

seat

couch

desk

recliner

sofa
wood
cushion
swivel
stool
sitting
rocking
bench

RECALL if A
MATH if B

GET READY
5

GET READY
4

GET READY
3

GET READY
2
GET READY

1

List 5

hot

snow

warm

winter
freeze
air

shiver
Arctic

frost
RECALL if A
MATH if B
surgeon  clinic

cure

MATH if A
RECALL if B

GET READY
5

GET READY
4
GET READY 3

GET READY 2

GET READY 1

List 7

shoe

hand
toe

kick

sandals

soccer

yard

walk
mouth

MATH if A
RECALL if B

GET READY
5

GET READY
4

GET READY
3

GET READY
2
GET READY

1

List 8

apple

vegetable

orange

kiwi
basket
juice

salad
bowl

cocktail
RECALL if A
MATH if B
boy
dolls
female
young
dress
pretty
hair  niece

dance  beautiful

cute  date
aunt

daughter

sister

MATH if A
RECALL if B

GET READY
5

GET READY
4
GET READY 3

GET READY 2

GET READY 1

List 10

low

clouds
up
tall
tower
jump
above
building
<table>
<thead>
<tr>
<th>noon</th>
<th>cliff</th>
</tr>
</thead>
<tbody>
<tr>
<td>sky</td>
<td>over</td>
</tr>
<tr>
<td>airplane</td>
<td>dive</td>
</tr>
</tbody>
</table>
elevate

RECALL if A
MATH if B

GET READY
5

GET READY
4

GET READY
3

GET READY
2
GET READY

List 11

queen
England
crown
prince
George  dictator

palace  throne

chess  rule
<table>
<thead>
<tr>
<th>subjects</th>
<th>monarch</th>
</tr>
</thead>
<tbody>
<tr>
<td>royal</td>
<td>leader</td>
</tr>
<tr>
<td>reign</td>
<td>RECALL if A MATH if B</td>
</tr>
<tr>
<td>GET READY 5</td>
<td>GET READY 4</td>
</tr>
<tr>
<td>GET READY 3</td>
<td>GET READY 2</td>
</tr>
<tr>
<td>GET READY 1</td>
<td>List 12</td>
</tr>
</tbody>
</table>
muscle

suit

old

MATH if A
RECALL if B

GET READY
5

GET READY
4
GET READY 3

GET READY 2

GET READY 1

List 13

hill

valley
climb
summit
top
molehill
peak
plain
glacier  goat
bike  climber
range  steep
ski  MATH if A  
RECALL if B

GET READY  
5

GET READY  
4

GET READY  
3

GET READY  
2
GET READY
1

List 14

note

sound

piano

sing
symphony
orchestra
rhythm
jazz
art
RECALL if A MATH if B
GET READY
5

GET READY
4

GET READY
3

GET READY
2

GET READY
1

List 15
thread

pin

eye

sewing

sharp

point
syringe  cloth

knitting  RECALL if A MATH if B

GET READY 5  GET READY 4
GET READY
3
GET READY
2
GET READY
1
List 16
water
stream
winding

MATH if A
RECALL if B

GET READY
5

GET READY
4

GET READY
3

GET READY
2
GET READY

Do the Math problems

Recognition task

For each word on the list you should circle whether it is a “new word” (one that was not presented during the study trials) or an “old word” (one that was presented on the study trials. For the old words, you should also mark whether you “remember” it (you have a recollection of the word being presented) or whether you “know” it (although you don’t have a vivid recollection of the word being presented, you are sure that it was on the list).

Turn the Page

STOP

Mark if these words were presented
<table>
<thead>
<tr>
<th>Foot</th>
<th>Fruit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girl</td>
<td>High</td>
</tr>
<tr>
<td>King</td>
<td>Man</td>
</tr>
</tbody>
</table>
Mountain

Music

Needle

River

Thank you