## FORGET RATE ITEM 1 SPECIFICATIONS

(updated 07/14/2005)

# Task:

Learn 48 facts, 48 name-face pairs, and 48 obscure city-state pairs  $\rightarrow$  test retention at 5 min, 1 day, 2 days, 7 days, 14 days, and 28 days.

## Facts Stimuli:

Item	Fact	Question	Answer	
1	The military draft was enacted in 1863. In what year was the military draft enacted?		1863	
2	George Orwell's book "1984" was banned for being	What George Orwell book was banned for		
	"pro-communist."	being "pro-communist?"	1984	
3	Antarctica is the only continent with no land areas What is the only continent with no land		A	
	below sea level.	below sea level?	Antarctica	
4	P.T. Barnum opened the first public aquarium in the U.S.	U. S. by P. T. Barnum?		
5	The bat is the only land mammal native to New Zealand.	What is the only land mammal native to New Zealand? bat		
6	There is no Betty in the Flintstones Chewable Vitamins.	What character is missing from the Flintstones Chewable Vitamins?	Betty	
7	Paul Hewson is the real name of Bono, the lead singer of the band U2.	Paul Hewson is the real name of what singer of the band U2. Bono		
8	The oldest church bells in the U.S. are in Boston.	In what city are the oldest churchbells in the U. S.?	Boston	
9		What country produces two-thirds of the	Doston	
-	Congo produces two-thirds of the world's cobalt.	world's cobalt?	Congo	
10		Marion Donovan patented what disposable		
	Marion Donovan patented the disposable diaper.	product?	diaper	
11	The word "puppy" comes from the French word for	The word "puppy" comes from the French word		
	"doll."	for what?	doll	
12	The killer whale is a member of the dolphin family.	The killer whale is a member of what family?	dolphin	
13	The elephant is the only animal with 4 knees.	What is the only animal with four knees?	elephant	
14	Hewlett Packard's first product, an audio oscillator,	Hewlett Packard's first product, an audio		
	was used in the Disney movie Fantasia.	oscillator, was used in what Disney movie?	Fantasia	
15	Fleas can accelerate 50 times faster than a space	What can accelerate 50 times faster than a		
47	shuttle.	space shuttle?	fleas	
16	Abraham Lincoln was assassinated at Fords	What is the name of the theater at which	Fanda	
17	Theater.	Abraham Lincoln was assassinated?	Fords	
17	The first winter Olympics were held in France	In what country were the first winter Olympics held?	France	
18	The first winter Olympics were held in France.		giraffe	
18	Giraffes are the only animals born with horns.	What is the only animal born with horns? Cashmere is produced from what animal?	J	
20	Cashmere is produced from goats. The original Hollywood sign read "Hollywoodland."	What did the original Hollywood sign read?	goat Hollywoodland	
20	The Incas developed the decimal system hundreds	What did the original Hollywood sign read? Who developed the decimal system hundreds	rionywoodiand	
<b>41</b>	of years before the Europeans.	of years before the Europeans?	Incas	
22		What country has more Universities than any	incas	
22	India has more Universities than any other country.	other country?	India	
23	Of all U. S. professionals, journalists have the	Of all U. S. professionals, who has the largest		
	largest vocabulary.	vocabulary?	journalists	
24		What body part are human babies born	Journanoio	
	Human babies are born without kneecaps.	without?	kneecaps	
25	Koalas and humans are the only animals with	Other than humans, what other animal has		
	unique prints.	unique prints?	koala	
26	The cat was the ancient Roman symbol of liberty.	The cat was the ancient Roman symbol of liberty		
27	The Nelly is the Canadian equivalent of the Emmy award.	What is the Canadian equivalent of an Emmy award? Nelly		
28	The Netherlands have the lowest altitude of any	What country has the lowest altitude of any	Netherlands	
	country in the world.	country in the world?		
29	The working title of the TV show "Dynasty" was	What was the working title of the TV show		
	"Oil".	"Dynasty"?	Oil	

30	George Washington's nickname for his wife Martha	What was George Washington's nickname for	Datas	
	was Patsy.	his wife Martha?	Patsy	
31	Pears are a member of the rose family	What fruit is a member of the rose family? pear		
32	The first daily newspaper was published in Philadelphia.	In what city was the first daily newspaper published? Philadelph		
33	"Playboy" magazine was once called "Stag Party".	What magazine was once called "Stag Party?" Playboy		
34	The most carnivorous of all bears is the polar bear.	What type of bear is the most carnivorous of all bears?		
35	Rainfall is measured with an Ombrometer.	What does an ombrometer measure?	rainfall	
36	Barbie doll's last name is Roberts.	What is Barbie doll's last name?	Roberts	
37	Saturn has more moons than any other planet in our solar system.			
38	The most common street name in the U. S. is "Second."	What is the most common street name in the U.S.?	Second	
39	Superman appears, either by name or in picture, in every episode of Seinfeld.	On what sitcom does superman appear, either by name or in picture, in every episode?	Seinfeld	
40	Catgut, once used to string tennis rackets, comes from sheep intestines.	Catgut, once used to string tennis rackets, comes from the intestines of what animal?	sheep	
41	The Carthaginians used snakes to defeat the Romans in 3 B.C.	What did the Carthaginians use to defeat the Romans in 3 B.C.? snakes		
42	The study of soil is paedology.	Paedology is the study of what? soil		
43	Julius Cesare died of thirst.	What did Julius Cesare die of?	thirst	
44	Sarah Bernhardt was the first actress to wear trousers.	Sarah Bernhardt was the first actress to wear what? trousers		
45	Other than Earth, the only planet named after a Greek god is Uranus.	Other than Earth, what is the only planet named after a Greek god? Uranus		
46	The name Wendy was created for the book Peter Pan.	What name was created for the book Peter Pan? Wendy		
47	A gam is a collection of whales.	A gam is a collection of what? whales		
48	In mythology, Romulus and Remus were raised by a wolf.			

# Obscure City-State Stimuli:

Item	City	State
1	Eek	Alaska
2	Why	Arizona
3	Floss	Arkansas
4	Wimp	California
5	Hygiene	Colorado
6	Mianus	Connecticut
7	Hellhole	Idaho
8	Gas	Kansas
9	Smile	Kentucky
10	Convent	Louisiana
11	Nowthen	Minnesota
12	Soso	Mississippi
13	Worms	Nebraska
14	Jobs	Ohio
15	Greasy	Oklahoma
16	Drain	Oregon
17	Panic	Pennsylvania
18	Life	Tennessee
19	Earth	Texas

# <u>Name Stimuli</u>:

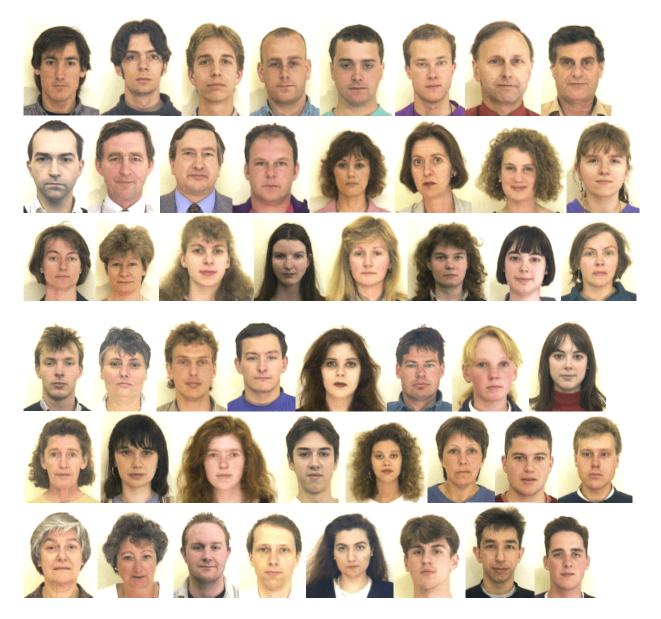
Item	<u>Male name</u>
1	James
2	John
3	Robert
4	Michael
5	William
6	David
7	Richard
8	Charles
9	Joseph
10	Thomas
11	Christopher
12	Daniel
13	Larry
14	Mark
15	Donald
16	George
17	Kenneth
18	Steven
19	Edward

20	Hardup	Utah	
21	Notown	Vermont	
22	Nuttsville	Virginia	
23	Imalone	Wisconsin	
24	Chugwater	Wyoming	
25	Killen	Alabama	
26	Hourglass	Delaware	
27	Crackertown	Florida	
28	Between	Georgia	
29	Papa	Hawaii	
30	Melody	Illinois	
31	Buddha	Indiana	
32	Diagonal	lowa	
33	Robinhood	Maine	
34	Madonna	Maryland	
35	Belchertown	Massachusetts	
36	Slapneck	Michigan	
37	Enough	Missouri	
38	Belt	Montana	
39	Gabbs	Nevada	
40	Tokeland	Washington	
41	Coward	South Carolina	
42	Elf	North Carolina	
43	Odd	West Virginia	
44	Rudeville	New Jersey	
45	Zap	North Dakota	
46	Lawyersville	New York	
47	Lama	New Mexico	
48	Nooseneck	Rhode Island	

20	Brian
21	Anthony
22	Kevin
23	Jason
24	Matthew

Item	<u>Female name</u>
25	Mary
26	Patricia
27	Linda
28	Barbara
29	Elizabeth
30	Jennifer
31	Susan
32	Nancy
33	Karen
34	Katie
35	Helen
36	Sandra
37	Donna
38	Ruth
39	Sharon
40	Laura
41	Sarah
42	Amy
43	Anna
44	Pamela
45	Diane
46	Christine
47	Janet
48	Alice

## Faces Stimuli:



#### **Design**:

3 within-subjects materials conditions:

- 1. Facts
- 2. City-state pairs
- 3. Face-name pairs

6 within-subjects retention interval (RI) conditions:

- 1. 5 min
- 2. 1 day
- 3. 2 days
- 4. 7 days
- 5. 14 days
- 6. 28 days

Items will be randomly assigned to conditions for each subject (8 items per condition)

Condition	Item #	Materials	RI
1	1-8	Fact	5 min
2	9-16	Fact	1 day
3	17-24	Fact	2 day
4	25-32	Fact	7 day
5	33-40	Fact	14 day
6	41-48	Fact	28 day
7	49-56	City-state	5 min
8	57-64	City-state	1 day
9	65-72	City-state	2 day
10	73-80	City-state	7 day
11	81-88	City-state	14 day
12	89-96	City-state	28 day
13	97-104	Face-name	5 min
14	105-112	Face-name	1 day
15	113-120	Face-name	2 day
16	121-128	Face-name	7 day
17	129-136	Face-name	14 day
18	137-144	Face-name	28 day

#### Session 1:

Block 1:

• <u>Presentation phase</u>: Present 36 items (2 from each condition) in random order, each for 6 sec, followed by blank screen with 'continue' button (6 sec x 36 items = 3.6 min).

- <u>Test phase</u>: Immediately after presentation, present same 36 items, in random order, for test.
  - <u>Facts</u>: Present question alone  $\rightarrow$  subject given unlimited time to type in correct one-word answer (assume about 4 sec), followed by correct answer feedback for 2 sec.
  - <u>*City-State Pairs:*</u> Present city alone  $\rightarrow$  subject given unlimited time to type in correct state (assume about 4 sec), followed by correct answer feedback for 2 sec.
  - *Face-Name Pairs:* Present face alone → subject given unlimited time to type in correct one-word name (assume about 4 sec), followed by correct answer feedback for 2 sec.

<u>Testing Procedure</u>: Use modified drop-out technique in which all 36 items are tested (+ feedback) in random order, then *only error responses* are tested again (+ feedback) in random order, until one correct response per item occurs. (Assume about 60 trials required, 60 trials x 6 seconds = 6 min). Total time Block 1 = 9.6 min.

<u>Block 2</u>: Repeat Block 1 with 36 new items (2 per condition). Total time Block 2 = 9.6 min.

<u>Block 3</u>: Repeat Block 2 with 36 new items (2 per condition). Total time Block 3 = 9.6 min.

<u>Block 4</u>: Repeat Block 3 with 36 new items (2 per condition). Total time Block 4 = 9.6 min.

After Block 4, test (+ feedback) *entire list* of 144 items again. Total time = 14.4 min.

- <u>Distracter phase</u>: 5 min of unrelated filler activity (Ed's smiley-face video game task).
- <u>Retention test 1</u>: Randomly present 8 items each from Facts, City-State Pairs, and Face-Name Pairs in test format → subject given unlimited time to type in answer. No feedback (≈ 4 sec per item x 24 items = 1.6 min).

#### Session 2:

<u>Retention test 2</u>: 1 day after Retention Test 1, randomly present 8 new items each from Facts, City-State Pairs, and Face-Name Pairs in test format  $\rightarrow$  subject given unlimited time to type in answer. No feedback ( $\approx$  4 sec per item x 24 items = 1.6 min).

#### Session 3:

<u>Retention test 3</u>: 2 days after Retention Test 1, randomly present 8 new items each from Facts, City-State Pairs, and Face-Name Pairs in test format  $\rightarrow$  subject given unlimited time to type in answer. No feedback ( $\approx$  4 sec per item x 24 items = 1.6 min).

#### Session 4:

<u>Retention test 4</u>: 7 days after Retention Test 1, randomly present 8 new items each from Facts, City-State Pairs, and Face-Name Pairs in test format  $\rightarrow$  subject given unlimited time to type in answer. No feedback ( $\approx$  4 sec per item x 24 items = 1.6 min).

#### Session 5:

<u>Retention test 5</u>: 14 days after Retention Test 1, randomly present 8 new items each from Facts, City-State Pairs, and Face-Name Pairs in test format  $\rightarrow$  subject given unlimited time to type in answer. No feedback ( $\approx$  4 sec per item x 24 items = 1.6 min).

#### Session 6:

<u>Retention test 6</u>: 28 days after Retention Test 1, randomly present 8 new items each from Facts, City-State Pairs, and Face-Name Pairs in test format  $\rightarrow$  subject given unlimited time to type in answer. No feedback ( $\approx$  4 sec per item x 24 items = 1.6 min).

**Total time to complete:** 3 min for consent and instructions + Session 1 (59.4 min) + Session 2 (1.6 min) + Session 3 (1.6 min) + Session 4 (1.6 min) + Session 5 (1.6 min) + Session 6 (1.6 min) = 67.4 min.

<u>Subjects</u>: 70 web-based paid subjects (\$30 U. S.). Run 10 subjects first and examine how many trials required with drop-out technique.