Debate Winter School

# WORKBOOK

## **Worksheets & Exercises**



#### WORKSHEET 1 - DRILL

#### **Asking/Answering Theses**

**Instructions:** Decide who will be Challenger and who will be Defender. The Challenger says "Take the subject" and says the written subject. Then they say "It follows that it is" and then says the predicate. You may add articles like "the, a, an" as desired, or add "s" for a plural.

The Defender then answers with either "I accept" or "Why?" After #15, switch roles. Ask and answer as quickly as you can!

1	Subject:	Cow	It follows it is:	Animal
2	Subject:	Cow	It follows it is:	Camel
3	Subject:	Camel	It follows it is:	Mammal
4	Subject:	Mammal	It follows it is:	Camel
5	Subject:	Car	It follows it is:	Train
6	Subject:	Train car	It follows it is:	Car
7	Subject:	Toyota	It follows it is:	Car
8	Subject:	Car	It follows it is:	Toyota Prius
9	Subject:	Tesla	It follows it is:	Car
10	Subject:	Boat	It follows it is:	Form
11	Subject:	Boat	It follows it is:	Color
12	Subject:	Boat	It follows it is:	Shape
13	Subject:	Shape of a boat	It follows it is:	Boat
14	Subject:	Shape of a boat	It follows it is:	Long shape
15	Subject:	Shape of a boat	It follows it is:	Tall shape
16	Subject:	Shape of a boat	It follows it is:	Form
17	Subject:	Form	It follows it is:	Shape
18	Subject:	Form	It follows it is:	Color
19	Subject:	Red	It follows it is:	Color

20	Subject:	Green	It follows it is:	Color
21	Subject:	Green	It follows it is:	Primary color
22	Subject:	Color of grass	It follows it is:	Primary color
23	Subject:	Color of grass	It follows it is:	Green
24	Subject:	Color of clouds	It follows it is:	Secondary color
25	Subject:	Color of clouds	It follows it is:	White
26	Subject:	Color of clouds	It follows it is:	Primary color
27	Subject:	Primary color	It follows it is:	White
28	Subject:	Color of a car	It follows it is:	Blue
29	Subject:	Color of a car	It follows it is:	Color
30	Subject:	Color of light	It follows it is:	White

#### WORKSHEET 2 - DRILL

#### **Asking/Answering Theses 2**

Instructions: Decide who will be challenger and who will be defender. The challenger says "Take the subject" and says the written subject. Then they say "It follows it is" and then says the predicate. You may add articles or plural markers as desired. The defender then answers with either "I accept" or "Why?"

Ask and answer as quickly as you can! Switch roles after #15.

Subject: The Empire State Building	It follows it is: Shape
Subject: The Empire State Building	It follows it is: High shape
Subject: The Empire State Building	It follows it is: Even shape
Subject: Soundwaves	It follows it is: Sound
Subject: The sound of bells	It follows it is: Sound
Subject: The sound of bells	It follows it is: Intelligible sound
Subject: A cat's purr	It follows it is: Unintelligible
	sound
Subject: The word "Hello"	It follows it is: Sound
Subject: The word "Hello"	It follows it is: Unintelligible sound
Subject: The word "Hello"	It follows it: Creates an understanding of semantic content
	Building Subject: The Empire State Building Subject: The Empire State Building Subject: Soundwaves Subject: The sound of bells Subject: The sound of bells Subject: A cat's purr Subject: The word "Hello" Subject: The word "Hello"

11	Subject: wave	The gesture of a hand	It follows it: C understanding content	
12	Subject: wave	The gesture of a hand	It follows it is:	Intelligible sound
13	Subject: wave	The gesture of a hand	It follows it is:	Shape
14	Subject:	An explosion	It follows it is:	Sound
15	Subject:	The Big Bang	It follows it is:	Sound
16	Subject:	Beethoven's 5th	It follows it is:	Intelligible sound
17	Subject:	The smell of incense	It follows it is:	Smell
18	Subject:	The smell of incense	It follows it is:	Natural smell
19	Subject:	The smell of incense	It follows it is:	Fragrant smell
20	Subject:	The smell of soap	It follows it is:	Artificial smell
21	Subject:	The smell of garbage	It follows it is:	Natural smell
22	Subject: grass	The smell of fresh cut	It follows it is:	Woody smell
23	Subject:	The flavor of masala	It follows it is:	Taste
24	Subject:	The flavor of masala	It follows it is:	Spicy taste
25	Subject:	The flavor of ginger	It follows it is:	Sweet taste
26	Subject:	The flavor of onions	It follows it is:	Astringent taste
27	Subject:	Feather	It follows it is:	Tactile object
28	Subject:	Feather	It follows it is: object	Lightness tactile
29	Subject:	Feather	It follows it is: object	Softness tactile
30	Subject: Building	The Empire State	<b>v</b>	The solid element

#### WORKSHEET 3 - DRILL

#### **Asking/Answering Theses 3**

Instructions: Decide who will be challenger and who will be defender. The challenger says "Take the subject" and says the written subject. Then they say "It follows it is" and then says the predicate. You may add articles or plural markers as desired. The defender then answers with either "I accept" or "Why?"

Ask and answer as quickly as you can! Switch roles after #15.

1	Subject: The color blue	It follows it is: The color of a blue
		car
2	Subject: The color of a blue car	It follows it is: The color blue
3	Subject: The color of a blue sky	It follows it is: Blue
4	Subject: The color of a blue sky	It follows it is: The color of light
5	Subject: The color of a blue sky	It follows it is: Secondary color
6	Subject: The color of a blue sky	It follows it is: The color of a blue
		car
7	Subject: The color of light	It follows it is: Existent
8	Subject: The color of a cloud	It follows it is: Thing
9	Subject: The word "Goodbye"	It follows it is: Impermanent
		object
10	Subject: The word "Goodbye"	It follows it is: Matter
11	Subject: The word "Goodbye"	It follows it is: Particle-like or
		composed of particles
12	Subject: Thing	It follows it is: An object of
		thought

13	Subject:	Rabbit's horn	It follows it is: An object of
			conceptual thought
14	Subject:	Unicorn	It follows it is: Object
15	Subject:	Rabbit's horn	It follows it is: Knowable object
16	Subject:	Thing	It follows it is: One
17	Subject:	Object	It follows it is: Different
18	Subject:	Things and objects	It follows they are: One
19	Subject:	Things are objects	It follows they are: Causes
20	Subject:	Established base	It follows it is: Cause
21	Subject:	Existent	It follows it is: Permanent object
22	Subject:	Object	It follows it is: Impermanent
			object
23	Subject:	Mind	It follows it is: Permanent object
24	Subject:	Consciousness	It follows it is: Mind
25	Subject:	Non-thing	It follows it is: Existent
26	Subject:	Non-mind	It follows it is: Negative object
27	Subject:	Non-mind	It follows it is: Positive object
28	Subject:	Impermanent object	It follows it is: Positive object
29	Subject:	Permanent object	It follows it is: Negative object
30	Subject:	The water element	It follows it is: Liquid
	-		-

### SCRIPT Counting Debate

A Counting Debate is simply where the debaters go through an outline to lay the groundwork for a logic debate – it is like a quiz testing if the Defender has memorized the outline.

**Instructions:** Decide who will be Defender and who will be Challenger. The challenger reads the lines beginning with "C" and the Defender reads the lines beginning with "D." Then switch roles and repeat.

Red text = Subject Blue text = Predicate

#### C: DHI Jitar Chochen!

It follows that you can posit the definition of matter.

D: I accept.

C: Posit it!

D: Take the subject: something that is established as particle-like or composed of particles.

C: Take the subject: something that is established as particle-like or composed of particles. It follows that it is the definition of matter?

D: I accept.

C: It follows you can posit the divisions of matter!

D: I accept.

C: Posit them.

D: Take the subject: External matter and internal matter.

C: Take the subject: External matter and internal matter. It follows these are the divisions of matter?

D: I accept.

C: It follows you can posit the definition of external matter?

D: I accept.

C: Posit it.

D: Take the subject: a physical cause giving rise to sense impressions which is not found within the continuum of a conscious organism.

C: Take the subject a physical cause giving rise to sense impressions which is not found within the continuum of a conscious organism. It follows that it's the definition of external matter.

D: I accept.

C: It follows you can posit the divisions of external matter?

D: I accept.

C: Posit them.

**D:** Take the subject:

forms sounds

smells

tastes

tactile objects

**C:** Take the subject:

forms

sounds

smells

tastes

tactile objects

It follows these are the divisions of external matter.

D: I accept.

C: It follows you can posit the definition of form.

D: I accept.

C: Posit it!

D: Take the subject: an object given over to experience through the eye sensing modality and seen in the domain of visual consciousness.

C: Take the subject: an object given over to experience through the eye sensing modality and seen in the domain of visual consciousness. It follows that it's the definition of form.

D: I accept.

C: It follows you can posit the divisions of form?

D: I accept.

**C:** Posit them

D: Take the subject: shapes and colors.

C: Take the subject: shapes and colors. It follows they are the divisions of form.

D: I accept.

C: It follows you can posit the definition of shape.

D: I accept.

C: Posit it.

D: Take the subject: something reasonably identified as shape.

C: Take the subject: something reasonably identified as shape. It follows that it is the definition of shape.

#### D: I accept.

C: It follows you can posit the divisions of shape?

#### D: I accept.

#### C: Posit them.

**D:** Take the subject:

Long shape Short shape High shape Low shape Round shape Cubed shape Even shape Uneven shape

C: Take the subject:

Long shape Short shape High shape Low shape Round shape Cubed shape Even shape Uneven shape It follows these are the divisions of shape.

#### D: I accept.

C: It follows that you can posit the definition of long shape.

#### D: I accept.

#### C: What is it?

D: Take the subject: A shape characterized by lengthiness.

C: Take the subject: A shape characterized by lengthiness. It follows that it's the definition of long shape.

D: I accept.

Follow the same pattern for definitions of short shape, high shape, etc.

C: It follows that you can posit the definition of color.

D: I accept.

C: Posit it.

D: Take the subject: Something reasonably described as hue.

C: Take the subject: Something reasonably described as hue. It follows that it's the definition of color.

D: I accept.

C: It follows you can posit the divisions of colors?

D: I accept.

C: Posit them.

D: Take the subject: primary colors and secondary colors.

C: Take the subject: primary colors and secondary colors. It follows they are the divisions of colors.

D: I accept.

C: It follows you can posit the definition of primary color?

D: I accept

C: Posit it.

D: Take the subject: Something reasonably described as a primary hue.

C: Take the subject: Something reasonably described as a primary hue. It follows that it's the definition of primary color.

D: I accept.

Follow the same pattern for definition of secondary colors

C: It follows you can posit the divisions of primary colors in additive color mixing (mixing light).

D: I accept.

C: Posit them.

D: Take the subject: Red Green Blue

C: Take the subject:

Red Green

Blue

It follows these are the divisions of primary color in additive color mixing.

D: I accept.

Definitions of each color follow the same pattern as for primary color, i.e., something reasonably described as a red hue, etc.

C: It follows you can posit the divisions of primary colors in subtractive color mixing (mixing pigments).

D: I accept.

C: Posit them.

D: Take the subject: Blue Yellow Red White

C: Take the subject:

Blue Yellow

Red

white

It follows these are the divisions of primary color in subtractive color mixing.

D: I accept.

Definitions of each color follow the same pattern as for primary color, *i.e.*, something reasonably described as a blue hue, etc.

C: It follows you can posit the divisions of secondary colors.

D: I accept.

**C:** Posit them

D: Take the subject:

The color of clouds The color of smoke The color of dust The color of mist The color of light The color of darkness The color of sunrays The color of shadows

#### C: Take the subject:

The color of clouds The color of smoke The color of dust The color of mist The color of light The color of darkness The color of sunrays The color of shadows It follows those are the divisions of secondary colors.

D: I accept.

C: It follows you can posit the definition of the color of clouds.

D: I accept.

C: Posit it.

D: Take the subject: something reasonably described as the hue of clouds.

C: Take the subject: something reasonably described as the hue of clouds. It follows that it is the definition of the color of clouds.

D: I accept.

Definitions and divisions of the remaining types of exterior matter follow the same pattern as for forms. Find the definitions and divisions in the textbook Nalanda Debate: Logic for Your World.

#### WORKSHEET 4 - DRILL Choosing your Responses

Instructions: Decide who will be Challenger and who will be Defender. The Challenger will start by reading the first two columns (labeled C) and then the Defender (D) will respond. Both Challenger and Defender continue responding as indicated, choosing from the options given.

1.				
С	С	D	С	D
Take the	It follows	1	because?	because it is something
subject	that it is	accept		reasonably identified as
				shape [definition]
The Empire	shape	Why?	because it is	reason not true
State			something	no pervasion
Building			reasonably	l accept
			identified as shape	
			[definition]	

Ζ.				
С	C:	D	С	D
Take the subject	It follows that it is	l accept	because?	because it is a shape characterized by tallness [definition
The Empire	high shape	Why?	because it is a	reason not true
State			shape	no pervasion
Building			characterized by	l accept
			tallness [definition]	

3.				
С	C:	D	С	D
Take the	It follows	1	because?	because it is a shape
subject	that it is	accept		characterized by
				evenness or flatness
The Empire	even shape			[definition]
State		Why?	because it is a	reason not true
Building			shape	no pervasion
			characterized by	l accept
			evenness or	
			flatness	
			[definition]	

4.	1	T	1	
С	C:	D	С	D
Take the	lt	1	because?	because it is an object
subject	follows	accept		heard in the domain of
	that it			auditory consciousness.
Soundwaves	is			[definition]
		Why?	because it is an	reason not true
	sound		object heard in the	no pervasion
			domain of auditory	l accept
			consciousness.	
			[definition]	

5.				
С	C:	D	С	D
Take the subject	lt follows that it	l accept	Because?	because it is an object heard in the domain of auditory consciousness.
The	is			[definition]
sound of		Why?	because it is an object	reason not true
bells	sound		heard in the domain of	no pervasion
			auditory consciousness. [definition]	l accept

0.	T	1		
С	C:	D	C	D
Take the	It follows	l accept	because?	because it is an object
subject	that it is			in the domain of
				auditory
The	intelligible			consciousness which
sound of	sound			creates an
bells				understanding of
				semantic content.
				[definition]
		Why?	because it is an object	reason not true
			in the domain of	no pervasion
			auditory consciousness	l accept
			which creates an	
			understanding of	
			semantic content.	
			[definition]	

So far, we have given only definitions as reasons, but you can provide other reasons also. for example....

7.				
С	С	D	С	D
Take the	It follows	1	because?	because it is intelligible
subject	that it is	accept		sound
				[category/division]
the word	sound	Why?	because it is	reason not true
"hello"			intelligible sound.	no pervasion
			[category/division]	l accept

0	
Χ.	

0.				
С	C:	D	С	D
Take the subject	It follows that it is	l accept	because?	because it is <mark>speech</mark> [equivalent
-		•		phenomenon]
the word	intelligible	Why?	because it is	reason not true
"hello"	sound		speech [equivalent	no pervasion
			phenomenon]	l accept

0

9.				
С	C:	D	С	D
Take the subject	It follows that it is	l accept	because?	because it is intelligible sound [definiendum]
the	an object in the	Why?	because it is	reason not true
			intelligible	no pervasion
word	domain of		sound	l accept
"hello"	auditory		[definiendum]	
	consciousness			
	which creates an			
	understanding of			
	semantic content.			

Till now, most of us will agree on the above theses (if you don't that's great too!).

But now let's see about some more controversial theses.

For now, if you are confused by the difference between "reason not true" and "no pervasion"... don't panic. We will cover this again.

Some of these a very tricky. For now, take note of any confusion you have and we will discuss them when we reassemble.

10.			1	
C	C:	D	C	D
Take the	It follows	l accept	because?	because it is an object
subject	that it is			in the domain of
				auditory
a cat's	unintelligible			consciousness which
purr	sound			does not express a
				meaning. [definition]
		Why?	because it is an	reason not true
			object in the	no pervasion
			domain of	l accept
			auditory	
			consciousness	
			which does not	
			express a	
			meaning.	
			[definition]	

11.

С	C:	D	С	D
Take the	It follows	1	because?	Because it creates an
subject		accept		understanding of
				semantic content.
the	intelligible	Why?	because it <mark>creates an</mark>	reason not true
gesture	sound		understanding of	no pervasion
of a			semantic content.	l accept
hand				
wave				

12.				
С	C:	D	С	D
Take the	It follows that it		because?	because it is
subject		accept		communication
		Why?	because it is	reason not true
the			communication	no pervasion
gesture	creates an			l accept
of a	understanding of			
hand	semantic content.			
wave				

13.

С	C:	D	С	D
Take the	It follows	1	because?	because it is intelligible
subject	that it is	accept		sound
		Why?	because it is intelligible	reason not true
the	sound		sound	no pervasion
gesture				l accept
of a				
hand				
wave				

14.

14.				
С	C:	D	С	D
Take the subject	It follows that it is	l accept	because?	because it is an object heard in the domain of auditory
an	sound			consciousness.
explosion		Why?	because it is an	reason not true
			object heard in	no pervasion
			the domain of	l accept
			auditory	
			consciousness.	

15.				
С	С	D	С	D
	It follows that it is	l accept	because?	because it is an object seen in the domain of visual consciousness.
an explosion	form	Why?	because it is an object seen in the domain of visual consciousness.	reason not true no pervasion I accept

16.				
С	С	D	С	D
Take the	It follows that it	l accept	because?	because it is not
subject	is			matter
		Why?	because it is	reason not true
an	not sound		not matter	no pervasion
explosion				l accept

#### 17.

<b>1</b> /.				
С	C:	D	С	D
Take the	It follows that it	l accept	because?	because it is an
subject	is			explosion
		Why?	because it is an	reason not true
the big	sound		explosion	no pervasion
bang				l accept

#### You're doing great!

С	C:	D	С	D
Take the	It follows that it	l accept	because?	because it is sound
subject	is	raccept	beeduse	which expresses
				meaning
Beethoven's	intelligible sound	Why?	because it is	reason not true
5 <sup>th</sup>			sound which	no pervasion
Symphony			expresses	l accept
			meaning	

19.

<b>TJ</b> .				
С	C:	D	С	D
Take the	It follows that it	l accept	because?	because it is a fragrant
subject	is			smell
		Why?	Because it is a	reason not true
smell of	smell		fragrant smell	no pervasion
incense				l accept

20.

20.				
С	С	D	С	D
Take the		l accept	because?	because it is a smell
subject	is			that does not arise from mixing
smell of	natural smell			ingredients
incense		Why?	because it is a	reason not true
			smell that does	no pervasion
			not arise from	l accept
			mixing	
			ingredients	

ZI.				
С	С	D	С	D
Take the subject		l accept	because?	because it is a smell that arises from mixing ingredients
smell of incense	Artificial smell	Why?	because it is a smell that arises from mixing ingredients	reason not true no pervasion I accept

22.				
С	С	D	С	D
Take the	It follows that it	1	because?	because it is a fruity
subject	is	accept		smell
		Why?	because it is a	reason not true
smell of	artificial smell		fruity smell	no pervasion
soap				l accept

23.

23.				
С	С	D	С	D
Take the	It follows	1	because?	because it is <b>not</b> an
		1	Decause!	
subject	that it is	accept		object seen in the
				domain of visual
the	not a			consciousness.
flavour of	form	Why?	because it is <mark>not</mark> an	reason not true
onions			object seen in the	no pervasion
			domain of visual	l accept
			consciousness.	

С	С	D	С	D
Take the subject	lt follows	l accept	because?	because it is a taste
	that it	Why?	because it is a taste	reason not true
onions	is			no pervasion
				l accept
	not a			
	form			

25.				
С	С	D	С	D
Take the	It follows that	1	because?	because it is not a
subject	it is	accept		fruity smell.
		Why?	because it is	reason not true
the flavour	not a smell		not a fruity	no pervasion
of onions			smell.	l accept

#### WORKSHEET 5 - DRILL Reason True or Reason Not True

**Instructions:** The following syllogisms have reasons that are either true or not true. The Challenger will read out the subject, predicate and reason and the Defender will respond with "Reason not true" or "Reason true." Then change roles. You can start slowly but try to get faster as you practice.

Please remember that the phrase "Reason true" is not said ordinarily during debate – we are using it to simplify the syllogism; to just consider the reason e.g.

Take the subject:	It follow it is:	because it is:	Answer?
A flower	internal matter	external matter	REASON TRUE

To determine how to answer as the Defender,

Ask yourself: is a flower, external matter?

(if **no** then "reason not true") (if **yes** then "reason true")

\* Remember the reason might be true even though the syllogism is flawed. Just focus on the relation between the subject and the reason.

Now respond to the following with reason true/reason not true.

1	Subject:	It follows it is:	because it is:
	a flower	internal matter	matter
2	Subject:	It follows it is:	because it is:
	a flower	internal matter	an elephant
3	Subject:	It follows it is:	because it is:
	a flower		matter
		external matter	
4	Subject:	It follows it is:	because it is:
	a flower	internal matter	the ear's modality.
5	Subject:	It follows it is:	because it is:
	the color red	color	primary color
6	Subject:	It follows it is:	because it is:
	the color red	high shape	shape
7	Subject:	It follows it is:	because it is:
	the color blue	secondary color	a color

8	Subject:	It follows it is:	because it is:
	the color of clouds	matter	form
9	Subject:	It follows it is:	because it is:
	the color red	secondary color	shape
10	Subject:	It follows it is:	because it is:
	the color red	a shape	something reasonably identified as shape.
11.	Subject:	It follows it is:	because it is:
	the color red	a shape	something reasonably described
		,	as a hue.
12	Subject:	It follows it is:	because it is:
	the color red	a color	something reasonably described
			as a hue.
13.	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	a color
14.	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	a taste
15	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	exterior matter
16	Subject:	It follows it is:	because it is:
	a form	a color	an object seen in the domain of
			visual consciousness.
17	Subject:	It follows it is:	because it is:
	a form	a color	something reasonably described
			as a hue.
18	Subject:	It follows it is:	because it is:
	something reasonably	not a color	a secondary color
	described as a secondar	У	
	hue		
19	Subject:	It follows it is:	because it is:
	something reasonably	the color of mist	a color
	described as a hue		
20	Subject:	It follows it is:	because it is:
	color of dust	tangible object	matter
21	Subject:	It follows it is:	because it is:
	color of dust	red	something that is established as
			particle-like or composed of
			particles

22	Subject:	It follows it is:	because it is:
	color of dust	red	a secondary color.
23	Subject:	It follows it is:	because it is:
	color of dust	red	not blue
24	Subject:	It follows it is:	because it is:
	color of dust	red	blue
25	Subject:	It follows it is:	because it is:
	the shape of an oak tree	unintelligible sound	a shape
26	Subject:	It follows it is:	because it is:
	the shape of an oak tree	unintelligible sound	not intelligible sound.
27	Subject:	It follows it is:	because it is:
	a lemon	a woody smell	not a chemical smell
28	Subject:	It follows it is:	because it is:
	the smell of a lemon	not a citrusy smell	not a chemical smell
29	Subject:	It follows it is:	because it is:
	a fragrant smell	not a citrusy smell	not a shape
30	Subject:	It follows it is:	because it is:
	softness	not a citrusy smell	not a smell

#### WORKSHEET 6 - DRILL

#### **Pervasion or No Pervasion**

**Instructions:** The following syllogisms have either pervasion or no pervasion. The Challenger will read out the subject, predicate and reason and the Defender will respond with "Pervasion" or "No pervasion." Then change roles. You can start slowly but try to get faster as you practice.

Please recall that we do not use the phrase "Pervasion" as an answer when actually debating – it is used in this exercise for the sake of training.

e.g.

Take the subject:	It follow it is:	because it has:	Answer?
A flower	Sound	External matter	NO PERVASION

As the Defender, ask yourself the following question to determine which answer to give -

Ask yourself: is everything which is external matter a sound?

(if **no** then "no pervasion")

(if **yes** then "pervasion")

\* Remember that there might be pervasion even though the syllogism is flawed. Just focus on the relation between the reason and the predicate.

Now respond to the following with pervasion/no pervasion.

1	Subject:	It follows it is:	because it is:
	a flower	internal matter	matter
2	Subject:	It follows it is:	because it is:
	a flower	external matter	an elephant
3	Subject:	It follows it is:	because it is:
	a flower	external matter	matter
4	Subject:	It follows it is:	because it is:
	a flower	internal matter	the ear's modality
5	Subject:	It follows it is:	because it is:
	the color red	color	primary color
6	Subject:	It follows it is:	because it is:
	the color red	high shape	shape
7	Subject:	It follows it is:	because it is:
	the color blue	colour	a secondary color
8	Subject:	It follows it is:	because it is:
	the color of clouds	matter	form
9	Subject:	It follows it is:	because it is:
	the colour red	secondary color	shape
10	Subject:	It follows it is:	because it is:
	the color red	a shape	something reasonably identified as shape
11	Subject:	It follows it is:	because it is:
	the colour red	a shape	something reasonably described as a hue

12	Subject:	It follows it is:	because it is:
	the color red	a color	something reasonably described as a hue
13	Subject:	It follows it is:	because it is:
	shape	Matter	something that is established as particle-like or compose of particles
14	Subject:	It follows it is:	because it is:
•	the taste of chocolate	a bitter taste	a color
15	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	a taste
16	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	exterior matter
17	Subject:	It follows it is:	because it is:
	matter	form	an object seen in the domain of visual consciousness
18	Subject:	It follows it is:	because it is:
	something reasonably described as a secondary hue	not a color	a secondary color

19	Subject:	It follows it is:	because it is:
		secondary color	The color of wish
	something		The color of mist
	reasonably described as a hue		
20	Subject:	It follows it is:	because it is:
20			
	color of dust	tangible object	matter
21	Subject:	It follows it is:	because it is:
	color of dust	red	something that is
			established as particle-like
			or composed of particles
22	Subject:	It follows it is:	because it is:
	color of dust	red	not a tangible object
23	Subject:	It follows it is:	because it is:
	color of dust	red	not blue
24	Subject:	It follows it is:	because it is:
	color of dust	the color of a blue sky	blue
25	Subject:	It follows it is:	because it is:
	the shape of an oak	unintelligible sound	a shape
26	tree	It follows it is:	hoosuss it is
26	Subject:	It follows it is:	because it is:
	the shape of an oak tree	unintelligible sound	not intelligible sound
27	Subject:	It follows it is:	because it is:
	a lemon	a not a woody smell	a chemical smell

28	Subject:	It follows it is:	because it is:
	the smell of a lemon	not a citrusy smell	not a chemical smell
29	Subject:	It follows it is:	because it is:
	a fragrent smell	not a citrusy smell	not a shape
30	Subject:	It follows it is:	because it is:
	softness	not a citrusy smell	not a smell

#### WORKSHEET 7 DRILL Giving Your Own Reasons & Predicates

Instructions: Decide who will be Challenger and who will be Defender. The Challenger will start with the first two columns (labeled C), and the Defender (D) will respond. Then continue as before. But this time the Challenger or Defender must provide their **own reasons.** 

#### Now let's try with you providing your own reasons.

First experiment with using a definition of the predicate as a reason. **1.** 

С	С	D	С	D
Take the	It follows that it	1	because?	because
subject	is	accept		[put your own reason
				in here.]
smell of	smell	Why?	because[put	reason not true
garbage			your own	no pervasion
			reason in here]	l accept

۷.				
С	С	D	С	D
Take the subject	It follows that it is	l accept	because?	because [put your own reason
				in here.]
the flavour	smell	Why?	because	reason not true
of masala			[put your own	no pervasion
			reason in here]	l accept

3.				
С	С	D	С	D
Take the	It follows that	1	because?	because
subject	it is	accept		[put your own reason
				in here.]
the flavour	taste	Why?	because	reason not true
of masala			[put your own	no pervasion
			reason in here]	l accept

4.

С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
		Why?	because	reason not true
a feather	tactile object		[put your own	no pervasion
			reason in here]	l accept

5.

5.				
С	С	D	С	D
Take the	It follows that	I	because?	because [put your
subject	it is	accept		own reason in here.]
		Why?	because	reason not true
a feather	matter		[put your own	no pervasion
			reason in here]	l accept

Now try to use a **category/division** of the predicate as a reason.

0.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
		Why?	because	reason not true
red	colour		[put your own	no pervasion
			reason in here]	l accept

7.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
		Why?	because	reason not true
red	shape		[put your own	no pervasion
			reason in here]	l accept

8.

0.	0.				
С	С	D	С	D	
Take the	It follows that	1	because?	because [put your	
subject	it is	accept		own reason in here.]	
		Why?	because	reason not true	
sweet taste	external		[put your own	no pervasion	
	matter		reason in here]	l accept	

9.

9.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
		Why?	because	reason not true
sweet taste	internal matter			no pervasion
			[put your own	l accept
			reason in here]	

TO:					
С	С	D	С	D	
Take the	It follows that	1	because?	because [put your	
subject	it is	accept		own reason in here.]	
		Why?	because	reason not true	
apple	form		[put your own	no pervasion	
			reason in here]	l accept	

1	1.	
-		

С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
		Why?	because	reason not true
lemon	taste		[put your own	no pervasion
			reason in here]	l accept

Great! Lets make this a bit harder now. Providing your own **predicates** as well as **reasons**.

12.

С	С	D	С	D
Take the	It follows that	I	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
form	predicate here]		[put your own	no pervasion
			reason in here]	l accept

10.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
white	predicate here]		[put your own	no pervasion
			reason in here]	l accept

14.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
white rose	predicate here]		[put your own	no pervasion
			reason in here]	l accept

## 15.

С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
the smell of	predicate here]		[put your own	no pervasion
musty			reason in here]	l accept
clothes				

## 16.

10.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
an iPhone	predicate here]		[put your own	no pervasion
			reason in here]	l accept

С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
an electron	predicate here]		[put your own	no pervasion
			reason in here]	l accept

18.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
Planet Earth	predicate here]		[put your own	no pervasion
			reason in here]	l accept

#### 19.

С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
an	predicate here]		[put your own	no pervasion
impermanent			reason in here]	l accept
object				

#### 20.

20.				
С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
existent	predicate here]		[put your own	no pervasion
			reason in here]	l accept

С	С	D	С	D
Take the	It follows that	1	because?	because [put your
subject	it is	accept		own reason in here.]
	[put your own	Why?	because	reason not true
the body's	predicate here]		[put your own	no pervasion
modality			reason in here]	l accept

## WORKSHEET 8 - DRILL Thesis vs. Pervasion

Instructions: Decide who will be the Challenger and who will be Defender. The Challenger reads the thesis saying "Take the subject," then reads the written subject and predicate. Add articles like "the, a, an" as desired. The Defender then answers with either "I accept" or "Why?" The Challenger then reads the statement of pervasion, exactly as written. The Defender again answers with either "I accept" or "Why?" Switch roles after 15 questions.

Pay close attention and take note if it seems like the thesis statements and pervasions should get different responses or the same responses.

1	Subject: The color red	It follows it is: Primary color
2	It follows that if <i>it</i> is the colour red	Then it's necessarily primary color
3	Subject: The colour of a cloud	It follows it is: secondary color
4	It follows that if <i>it</i> is the color of a	Then it's necessarily secondary color
	cloud	
5	Subject: The taste of chocolate	It follows it is: sweet taste
6	It follows that if <i>it</i> is the taste of	Then it's necessarily sweet taste
	chocolate	
7	Subject: The shape of an oak tree	It follows it is: high shape
8	It follows that if <i>it</i> is The shape of an	Then it's necessarily high shape
	oak tree	
9	Subject: Color	It follows it is: Form
10	It follows that if <i>it</i> is Color	Then it's necessarily Form
11	Subject: Color	It follows it is: a category under which
		Red falls
12	It follows that if <i>it</i> is Color	Then it's necessarily a category under
		which Red falls
13	Subject: Something reasonably	It follows it is: The definition of color
	described as hue	

14		Then it's necessarily The definition of color
	hue	
15	Subject: Color	It follows it is: A singular object
	Now Switch Roles	
16	It follows that if <i>it</i> is Color	Then it's necessarily A singular object
17	Subject: Referent of the word "white"	It follows it is: the color white
18	It follows that if <i>it</i> is	Then it's necessarily the color white
	Referent of the word "white"	
19	Subject: <mark>Eye</mark>	It follows it is: Internal matter
20	It follows that if <i>it</i> is Eye	Then it's necessarily Internal matter
21	Subject: The color of light	It follows it is: Secondary color
22	It follows that if <i>it</i> is The color of	Then it's necessarily Secondary color
	light	
23	Subject: a ball	It follows it is: Round shape
24	It follows that if <i>it</i> is a ball	Then it's necessarily Round shape
25	Subject: A baby's cry	It follows it is: Intelligible sound
26	It follows that if <i>it</i> is a baby's cry	Then it's necessarily Intelligible sound
27	Subject: The smell of shampoo	It follows it is: Artificial smell
28	It follows that if <i>it</i> is the smell of	Then it's necessarily artificial smell
	shampoo	
29	Subject: The taste of lemons	It follows it is: Sour taste
30	It follows that if <i>it</i> is The taste of	Then it's necessarily Sour taste
	lemons	

## WORKSHEET 9 - DRILL Thesis vs. Pervasion

Instructions: Decide who will be the Challenger and who will be Defender. The Challenger reads the thesis saying "Take the subject," then reads the written subject and predicate. Add articles like "the, a, an" as desired. The Defender then answers with either "I accept" or "Why?" The Challenger then reads the statement of pervasion, exactly as written. The Defender again answers with either "I accept" or "Why?" Switch roles after 15 questions.

Pay close attention and take note if it seems like the thesis statements and pervasions should get different responses or the same responses.

1	Subject: Fire	It follows it is: Cause of smoke
2	It follows that if <i>it</i> is fire	Then it's necessarily cause of smoke
3	Subject: The cause of an oak tree	It follows it is: oak seed
4	It follows that if <i>it</i> is the cause of an oak tree	Then it's necessarily oak seed
5	Subject: The taste of chocolate	It follows it is: one nature with chocolate
6	It follows that if <i>it</i> is the taste of chocolate	Then it's necessarily one nature with chocolate
7	Subject: Shape	It follows it is: quality of an oak tree
8	It follows that if <i>it</i> is shape	Then it's necessarily quality of an oak tree
9	Subject: Color	It follows it is: not a plural object
10	It follows that if <i>it</i> is color	Then it's necessarily not a plural object
11	Subject: <mark>Blue</mark>	It follows it is: color of a blue car
12	It follows that if <i>it</i> is blue	Then it's necessarily color of a blue car
13	Subject: The color of a car	It follows it is: secondary color
14	It follows that if <i>it</i> is the color of a car	Then it's necessarily secondary color

15	Subject: Existent	It follows it is: permanent object
	Now Switch Roles	
16	It follows that if <i>it</i> is existent	Then it's necessarily permanent object
17	Subject: Mind	It follows it is: conscious
18	It follows that if <i>it</i> is	Then it's necessarily conscious
	mind	
19	Subject: The smell of flowers	It follows it is: pleasant smell
20	It follows that if <i>it</i> is the smell of	Then it's necessarily pleasant smell
	flowers	
21	Subject: Cause of an oak tree	It follows it is: direct cause of an oak
		tree
22	It follows that if <i>it</i> is cause of an oak	Then it's necessarily direct cause of an
	tree	oak tree
23	Subject: <mark>Square</mark>	It follows it is: shape
24	It follows that if <i>it</i> is square	Then it's necessarily shape
25	Subject: Bodhisattva	It follows it is: Human
26	It follows that if <i>it</i> is bodhisattva	Then it's necessarily human
27	Subject: Buddha	It follows it is: Person
28	It follows that if <i>it</i> is Buddha	Then it's necessarily person
29	Subject: Thing	It follows it is: Conceptual isolate of
		thing
30	It follows that if <i>it</i> is thing	Then it's necessarily conceptual
		isolate of thing

#### **WORKSHEET 10 - DRILL**

#### 2 Theses for 1 Pervasion

**Instructions:** First decide who will be Challenger and who will be Defender. Challenger will read out the statement of pervasion and Defender will say "I accept." Then the Challenger states the two thesis statements that are implied by the pervasion. Challenger must think of their own subject to use. The Defender says "I accept" after each one. After exercise #15, switch roles.

e.g.

C: It follows that if it is matter, it is necessarily impermanent.
D: I accept.
C: Take the subject: the sound of thunder. It follows that it's matter.
D: I accept.
C: Take the subject: the sound of thunder. It follows that it's impermanent.
D: I accept.

- 1 It follows that if it is external matter, then it's necessarily matter.
- 2 It follows that if it is form, then it's necessarily external matter.
- 3 It follows that if it is shape, then it's necessarily external matter.
- 4 It follows that if it is a round shape, then it's necessarily a shape.

- 5 It follows that if it is a shape of orb-like quality, then it's necessarily a round shape.
- 6 It follows that if it is the color of darkness, then it's necessarily a color.
- 7 It follows that if it is the color of darkness, then it's necessarily form.
- 8 It follows that if it is the color of darkness, then it's necessarily external matter.
- 9 It follows that if it is the color of darkness, then it's necessarily matter.
- 10 It follows that if it is the color of darkness, then it's necessarily particlelike or composed of particles.
- 11 It follows that if it is the color of darkness, then it's necessarily impermanent.
- 12 It follows that if it is the color of darkness, then it's necessarily selfless.
- 13 It follows that if it is impermanent, then it's necessarily selfless.
- 14 It follows that if it is color, then it's necessarily something reasonably described as a hue.

15 It follows that if it is shape, then it's necessarily something reasonably identified as shape.

#### **Now Switch Roles**

- 16 It follows that if it is intelligible sound, then it's necessarily sound.
- 17 It follows that if it is intelligible sound, then it's necessarily verbal speech.
- 18 It follows that if it is sound, then it's necessarily external matter.
- 19 It follows that if it is external matter, then it's necessarily something that is particle-like or composed of particles.
- 20 It follows that if it is something that is particle-like or composed of particles, then it's necessarily impermanent.
- 21 It follows that if it is something that is particle-like or composed of particles, then it's necessarily selfless.
- 22 It follows that if it is a natural smell, then it's necessarily not an artificial smell.
- 23 It follows that if it is a natural smell, then it's necessarily a smell.

24 It follows that if it is a citrusy smell, then it's necessarily a smell.

- 25 It follows that if it is a smell, then it's necessarily not form.
- 26 It follows that if it is a taste, then it's necessarily an object tasted in the domain of tongue consciousness.
- 27 It follows that if it is earth, then it's necessarily an element of tangibility.
- 28 It follows that if it is earth, then it's necessarily a tactile object.
- 29 It follows that if it is earth, then it's necessarily external matter.
- 30 It follows that if it is fire, then it's necessarily something that is particlelike or composed of particles.

#### WORKSHEET 11 - DRILL

#### 2 Theses for 1 Pervasion (No Pervasion)

**Instructions:** First decide who will be Challenger and who will be Defender. Challenger will read out the statement of pervasion and Defender will say "Why?" Then the Challenger asks for an example. Defender provides an example, and then Challenger checks it. After exercise #15, switch roles.

e.g.

C: It follows that if it is impermanent, it is necessarily matter.

D: Why?

C: Posit an example.

D: Take the subject: an ear consciousness perceiving thunder.

C: Take the subject: an ear consciousness perceiving thunder. It follows that it's impermanent.

D: I accept.

C: Take the subject: an ear consciousness perceiving thunder. It follows that it's *not* matter.

D: I accept.

1 It follows that if it is matter, then it's necessarily external matter.

2 It follows that if it is external matter, then it's necessarily an element.

- 3 It follows that if it is external matter, then it's necessarily shape.
- 4 It follows that if it is a shape, then it's necessarily a round shape.
- 5 It follows that if it is a circle, then it's necessarily a round shape.
- 6 It follows that if it is color, then it's necessarily the color of darkness.
- 7 It follows that if it is form, then it's necessarily the color of light.
- 8 It follows that if it is external matter, then it's necessarily sound.
- 9 It follows that if it is matter, then it's necessarily taste.
- 10 It follows that if it is particle-like or composed of particles, then it's necessarily smell.
- 11 It follows that if it is object, then it's necessarily impermanent object.
- 12 It follows that if it is selfless, then it's necessarily object.
- 13 It follows that if it is selfless, then it's necessarily impermanent object.
- 14 It follows that if it is something reasonably described as a hue, then it's necessarily the definition of color.

15 It follows that if it is something reasonably identified as shape, then it's necessarily the definition of shape.

#### Now Switch Roles

- 16 It follows that if it is *not* intelligible sound, then it's necessarily *not* sound.
- 17 It follows that if it is *not* true speech, then it's necessarily *not* intelligible sound.
- 18 It follows that if it is *not* sound, then it's necessarily *not* external matter.
- 19 It follows that if it is *not* external matter, then it's necessarily *not* something that is particle-like or composed of particles.
- 20 It follows that if it is *not* something that is particle-like or composed of particles, then it's necessarily impermanent.
- 21 It follows that if it is *not* something that is particle-like or composed of particles, then it's necessarily selfless.
- 22 It follows that if it is a natural smell, then it's necessarily an artificial smell.

23 It follows that if it is *not* a natural smell, then it's necessarily a smell.

24 It follows that if it is a citrusy smell, then it's necessarily a woody smell.

25 It follows that if it is a smell, then it's necessarily not matter.

- 26 It follows that if it is a taste, then it's necessarily a sweet taste.
- 27 It follows that if it is particle-like or composed of particles, then it's necessarily an element of tangibility.
- 28 It follows that if it is the earth element, then it's necessarily a visual form.
- 29 It follows that if it is the earth element, then it's necessarily external matter.
- 30 It follows that if it is hot and burning, then it's necessarily fire.

#### WORKSHEET 12 - DRILL Restate the Pervasion

Instructions: Decide who will be Challenger and who will be Defender. Challenger reads the 3-Part Syllogism, beginning with "Take the subject," and then reads the written subject, predicate, and reason. The Defender responds by saying "No pervasion." The Challenger then says "Restate the pervasion" and the Defender states the **negated** pervasion, (making sure to include the word **not** before the word **necessarily**). Add articles like "the, an, a" as you wish.

#### e.g.

C: Take the subject: the sky. It follows that it's permanent, because it's matter.

D: No pervasion!

C: Restate the pervasion.

D: If *it* is matter, it's **not** necessarily permanent.

\* Remember that some of the pervasions are valid while others are not, but here we're just doing an exercise to train in the habit of learning how to restate the pervasion.

1	Subject:	It follows it is:	because it is:
	a flower	Not internal matter	matter
2	Subject:	It follows it is:	because it is:
	a flower	external matter	Not an elephant
3	Subject:	It follows it is:	because it is:
	a flower	Not external matter	matter
4	Subject:	It follows it is:	because it is:
	a flower	internal matter	particle-like or composed of
			particles
5	Subject:	It follows it is:	because it is:
	the color red	Not color	primary color
6	Subject:	It follows it is:	because it is:
	the color red	Secondary color	Not shape

7	Subject:	It follows it is:	because it is:
	the color blue	colour	Not a secondary color
8	Subject:	It follows it is:	because it is:
	the color of clouds	matter It follows it is:	Not sound because it is:
9	Subject: the color red		
10		Not secondary colour It follows it is:	Not shape because it is:
10	Subject: the color red	Not color	<b>Not</b> something reasonably
			identified as shape.
11	Subject:	It follows it is:	because it is:
11.	the color red	a shape	something reasonably described
		ashape	as a hue.
12	Subject:	It follows it is:	because it is:
	the color red	a color	Not something reasonably
			identified as a secondary hue.
13	Subject:	It follows it is:	because it is:
	shape	Not matter	particle-like or compose of
			particles
14.	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	A taste
15.	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	Not a color
16	Subject:	It follows it is:	because it is:
	the taste of chocolate	a sweet taste	external matter
17	Subject:	It follows it is:	because it is:
	matter	form	Not an object seen in the domain
			of visual consciousness.
18	Subject:	It follows it is:	because it is:
	something reasonably	<b>not</b> a color	a secondary color
	described as a secondar	Т <b>У</b>	
	hue		
19	Subject:	It follows it is:	because it is:
	something reasonably	primary color	The color of mist
	described as a hue		
20	Subject:	It follows it is:	because it is:
	color of dust	tangible object	matter

21	Subject: color of dust	It follows it is: red	because it is: particle-like or composed of
22	Subjects	It follows it is:	particles because it is:
22	Subject: color of dust	red	<b>not</b> a tangible object
22		It follows it is:	because it is:
25	Subject: color of dust	Not brown	<b>not</b> blue
24			
24	Subject:	It follows it is:	because it is:
	Color of a blue sky	Not blue	Not secondary color
25	Subject:	It follows it is:	because it is:
	the shape of an oak tree	<b>not</b> sound	Not short shape
26	Subject:	It follows it is:	because it is:
	the shape of an oak tree	unintelligible sound	<b>not</b> intelligible sound.
27	Subject:	It follows it is:	because it is:
	The smell of a lemon	<b>not</b> a woody smell	Not a chemical smell
28	Subject:	It follows it is:	because it is:
	the smell of a lemon	not a citrusy smell	not a sour taste
29	Subject:	It follows it is:	because it is:
	A fragrant smell	not a citrusy smell	<b>not</b> a shape
30	Subject:	It follows it is:	because it is:
	softness	<b>not</b> a tactile object	<b>not</b> element of tangibility

## WORKSHEET 13 - DRILL Reason not True or No Pervasion

Instructions: The following syllogisms are wrong. First decide who will be Challenger and who will be Defender. Challenger will read out the subject, predicate and reason and Defender will respond with "Reason not true" or "No pervasion." Then change roles. You can start slowly but try to get faster as you practice.

e.g.			
Take the subject:	It follow it is:	because it has:	Answer?
A flower	matter	energy	No pervasion

As the Defender, you can ask yourself the following questions to determine which answer to give...

First ask yourself: does a flower have energy?

(if **no** then "Reason not true").

Then ask yourself: is everything that has energy necessarily matter? (if no then "No pervasion".)

Now respond to the following with "Reason not true" or "No pervasion."

1	Subject:	It follows has:	because it has:
_	a flower	life	energy
2	Subject:	It follows it is:	because it is:
	a flower	Has energy	an elephant
3	Subject:	It follows it is:	because it is:
	a flower	a perception	created by neurological activity
4	Subject:	It follows it is:	because it is:
	the color red	A hallucination	A controlled hallucination
5	Subject:	It follows it is:	because it:
	the perception of the	A controlled hallucination	arises from top-down predictive
	colour blue		modeling inputs
6	Subject:	It follows it is:	because it is:
	the color red	secondary colour	shape
7	Subject:	It follows it is:	because it is:
	the color red	a shape	something reasonably identified
			as shape.
8	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	a color

9	Subject: the taste of chocolate	It follows it is: a bitter taste	because it is: a taste.
10	Subject:	It follows it is:	because it is:
	the taste of chocolate	a bitter taste	external matter.
11	Subject:	It follows it is:	because it is:
	a form	a color	an object given over to experience through eye sensing modality and seen in the domain
			of visual consciousness.
12	Subject:	It follows it is:	because it is:
	a form	a color	something reasonably described
			as a hue.
13	Subject:	It follows it is:	because it is:
	something reasonably	not a color	a secondary color.
	described as a hue		
14	Subject:	It follows it is:	because it is:
	something reasonably	the color of mist	a color.
	described as a hue		
15	Subject:	It follows it is:	because it is:
	color of dust	tangible object	matter.
16	Subject:	It follows it is:	because it is:
47	color of dust	red	a primary color.
17	Subject:	It follows it is:	because it is:
10	color of dust	red	a secondary color.
18	Subject:	It follows it is:	because it is:
10	color of dust	red It follows it is:	not blue.
19	Subject: color of dust	red	because it is: blue.
20	Subject:	It follows it is:	bide. because it is:
20	the shape of an oak tree		a sound.
21	Subject:	It follows it is:	because it is:
21	the shape of an oak tree		not intelligible sound.
22	Subject:	It follows it is:	because it is:
	a lemon	a woody smell	not a chemical smell.
23	Subject:	It follows it is:	because it is:
	the smell of a lemon	not a citrusy smell	not a chemical smell.
		-	

#### Note that a reason can be flawed even when the thesis itself is true.

24	Subject: The taste of milk chocolate	It follows it is: sweet taste *	because it is: a bitter taste.
25	Subject: The taste of milk chocolate	It follows it is: sweet taste*	because it is: a taste.
26	Subject: The ear's modality	It follows it is: internal matter*	because it is: matter.
27	Subject: the eye's modality	It follows it is: internal matter*	because it is: not matter.
28	Subject: the nose's modality	It follows it is: internal matter*	because it is: a minty smell.
29	Subject: the tongue's modality	It follows it is: internal matter*	because it is: not exterior matter.
30	Subject: the body's modality	It follows it is: internal matter*	because it is: particle- like or composed of particles.

#### WORKSHEET 14 - DRILL Extended Debates

**Instructions:** Choose who will be Challenger and who will be Defender. Try a debate starting with one of the following theses. When you get stuck check out the Extended Responses sheet to see if you can keep the debate going.

1.	Subject:	It follows it is:
	the empire State Building	a long shape
2.	Subject:	It follows it is:
	form	color
3.	Subject:	It follows it is:
_	the color of red dust	a secondary color
4.	Subject:	It follows it is:
	the color of a rainbow	a color
5.	Subject:	It follows it is:
	a quark	matter
6.	Subject:	It follows it is:
	white	a primary color
7.	Subject:	It follows it is:
	eye's modality	a visible object
	•	-
8.	Subject:	It follows it is:
-		

## the color of an imaginary red rose the color red

9.	Subject:	It follows it is:	
	the color of light	not the color white	
10.	Subject:	It follows it is:	
	the color of clear glass	a color	
11.	Subject:	It follows it is:	
	church bells	an intelligible sound	
11.	Subject:	It follows it is:	
	the smell of Dorian fruit	a fruity smell	
12.	Subject:	It follows it is:	
	the human body	external form	

## WORKSHEET 15 - DRILL The Joints of Reasoning (Common Objects)

**Instructions:** The Challenger will give two objects by saying e.g. "It follows you can posit the difference between flower and form in terms of Three Joints, Four Joints, Equivalence, or Contradiction." The Defender will accept and the Challenger will reply "Posit them."

The Defender will identify the Joints of Reasoning between the two objects: *three joints, four joints, equivalence, contradiction*.

For now, you needn't give examples, just state how many Joints the two objects have. Try to work through this drill as quickly as possible!

1. dog	animal
2. dog	cat
3. bird	animal with feather
4. big animal	mammal
5. feline	pet
6. red apple	red thing
7. green apple	red thing
8. thing with color	car
9. permanent thing	impermanent thing
10. hot liquid thing	tea
11. grey thing	thing that are not black
12. fire	water
13. sentient being	thing with mind
14. fish	animal that swim
15. human	mammal
16. elephant	thing with trunk
17. Indian animals	elephant
18. building	elephant
19. orange juice	that which is squeezed from an
	orange.
20. female	nun
21. female	giraffe
22. physical objects	observable object

23. female	person who wears a skirt
24. pot	earth
25. juice	not juice
26. things that have doors	vehicles
27. arachnid	eight legged creature
28. green	color of money
29. stars in the solar system	stars in the milky way
30. numbers	integers

Next pick out a few pairs that you like. The Challenger will ask the Defender how many Joints there are. The Challenger will then confirm the pervasions and ask the Defender for examples. (You can refer to the Counting the Joints Template to see how to do this.)

## WORKSHEET 16 - Drill The Joints of Debate (World of the Senses)

**Instructions:** The Challenger will give two objects by saying e.g. "It follows you can posit the difference between a flower and form in terms of Three Joints, Four Joints, Equivalence, and Contradiction." The Defender will accept and the Challenger will reply "Posit them!"

The Defender will identify the joints of reasoning between the two objects: *equivalence, contradiction, three joints, four joints.* 

The Challenger will then confirm the pervasions and ask the Defender for examples. (You can refer to the Joints of Debate Template to see how to do this)

The following are based on subjects from Lesson 2 of the Nalanda Debate textbook.

1.	flower pot	something that is particle-like or
_		composed of particles
2.	subtle auditory sensing structure	the ear's modality
3.	the nose's modality	the tongue's modality
4.	internal matter	the body's modality
5.	smell	object smelled in the domain of
_		olfactory consciousness
6.	tactile object	taste
7.	shape	color
8.	an object in the domain of an	intelligible sound
	auditory consciousness which	
	creates an understanding of	
_	semantic content.	
9.	nutty smell	natural smell
10.	the earth element	softness

Finally, pick out two subjects of your own choosing and try going over the joints, the pervasions and examples.

### WORKSHEET 17 - DRILL Tricky Joints

**Instructions:** The Challenger will give two objects by saying e.g. "It follows you can posit the difference between a flower and form in terms of Three Joints, Four Joints, Equivalence, and Contradiction." The Defender will accept and the Challenger will reply "Posit them!"

The Defender will identify the joints of reasoning between the two objects: *equivalence, contradiction, three joints, four joints.* 

The Challenger will then confirm the pervasions and ask the Defender for examples.

Here are some more interesting (and more difficult) subjects to compare. Don't be afraid to try out an answer to see if it works.

1. mind	consciousness
2. mind	brain
3. featherless bipeds	humans
4. humans	animals that use language
5. knowledge	things which have been learned
6. knowledge	information
7. caused things	impermanent objects
8. female	male
9. physical objects	observable objects
10. young people	old people
11. friend	foe
12. friend	relative
13. claim	information
<b>1J</b> . Cluim	
14. particle	wave

15. object of thought	phenomenon
16. mental consciousness	thought
17. planet inhabited by life	planet in the milky way
18. positive mental state	mental state with positive affect
19. prime numbers	even numbers
20 whole numbers	natural numbers

#### **WORKSHEET 18 - EXERCISE**

#### **Translating Colloquial into Nalanda Debate**

**Instructions:** Read through the following paragraphs and statements and try to ascertain the theses and pervasions that are being expressed by the colloquial statements. Then work with your partner to try and re-phrase them in the language of Nalanda Debate.

- "Homeless people don't deserve social services, because they're just lazy – anyone can go out and get a job! Why should they be a drag on the rest of society just because they decided not to work?"
- 2. "I'm such a fool! I can't believe I said that; now they're all going to think I'm an idiot and never have true respect for me. I can't show my face here again!"
- 3. "Look at how amazing the universe is! Its glory and beauty is not something that could have just randomly popped into existence. This is the proof that there must be a greater being behind it all, a perfect being who brought this wonderful creation into existence!"
- 4. "Look at how the different birds on the Galapagos Islands each have beaks shaped just perfectly for the seeds on the particular island on which they live. This means they must have adapted to their environment, changing over the course of generations to be

better suited to survive with the unique conditions of their environment."

- 5. "I saw a Facebook group with all these people talking about the terrible diseases and deaths from people taking vaccines! I even saw a video where a young woman just collapsed out of nowhere! Can't you see? Covid vaccines were just created to kill people."
- 6. "That guy in the pickup cut me off! He's an awful human being, just a total selfish jerk. I have every right to be angry at him and I'm not going to let this go. In fact, I hope he gets what's coming to him."
- 7. "Anger and greed are evolutionarily built into our human DNA. Across cultures and geographic zones, everywhere we look we see instances of violence, war, and acts of aggression. Anger is in fact a necessary quality because it alerts us to danger bad situations that could harm us. This is just part of human nature."
- 8. "The celestial bodies all pass from one side of the sky to the other. The stars and moon exhibit regular patterns of movement that recur month by month and year by year. Therefore, this cosmos beyond out Earth must be orbiting the Earth, with the Earth at the center of it all."
- 9. "When I think in a logical and unbiased way, it is obvious that all people, and even all living beings, enjoy happiness, care, and peace. None of them actually desires pain, misfortune, or harm. Compassion makes sense because it is a desire to see this

fundamental aim of living beings accomplished, without bias. Anger, however, is always associate with a narrow focus only on a specific limited group of individuals, or even just the needs of one person. Therefore, compassion is a valid mental state, while anger is a biased state."

10. "Whenever anger is present, the mind is worked up – thoughts spiral and ruminate about some small thing, without considering the full scenario and the needs of all the players involved. As soon as clear-minded reflection is applied, the anger begins to weaken, and I'm able to consider a wider range of possibilities for why things unfolded the way they did and how to respond. Compassion, on the other hand, only grows stronger when this kind of reflection is applied. The more one's scope broadens, the more stable the compassion becomes. Compassion is valid, and anger is invalid. Therefore, compassion can be infinitely increased, while anger cannot. Anger can be eliminated."

# Matter and the Physical World Debate Outline

## with definitions and categories for easy reference

## Key:

Text in this font and color indicates important definitions and categories, which are to be be used verbatim in your debates

Text in this font and color are explanations of the definitions, giving brief context for the approach used in making the categories of this outline.

#### Matter<sup>1</sup> – something that is established as particle-like or composed of particles

There are two types of matter when looked at from the perspective of their relationship to the affective quality of living organisms' minds:

- 1) matter foundational to the interior experiences of conscious organisms (Internal matter)
- 2) matter taken in as sensory content (External matter)

Material form – *something that can be pointed to or struck*<sup>2</sup>

Material form and matter are equivalent. Physical forms, material objects, and physical bodies are other equivalents of matter.

<sup>&</sup>lt;sup>1</sup> Most textbooks list *form* as the main category here, and *matter* is emphasized less. An alternative definition of *form* is posited as "That which is suitable as form." The above definition indicates localization and tangibility as qualities of form. This textbook is emphasizing matter, because it is a more familiar term than *form*. To avoid confusing the broad category of *form* with the first division of external matter (also called *forms*, as in visual forms), we have opted to use the more descriptive term *material form* for the broad category.

<sup>&</sup>lt;sup>2</sup> Readers will commonly see the definition of this definiendum cited as *that which is suitable as form*. The definition here is simply another feasible rendering of the Tibetan/Sanskrit, and highlights this important defining feature of physicality.

**Internal matter** – *a physical cause giving rise to sense impressions which is found within the continuum of a conscious organism.* 

- 1) the eye's modality subtle visual sensing structure
- 2) the ear's modality subtle auditory sensing structure
- 3) the nose's modality subtle olfactory sensing structure
- 4) the tongue's modality subtle gustatory sensing structure
- 5) the body's modality subtle tactile sensing structure

**External matter** – *a physical cause giving rise to sense impressions which is not found within the continuum of a conscious organism.* 

- 1) Form an object seen in the domain of visual consciousness
- 2) Sound an object heard in the domain of auditory consciousness
- 3) Smell an object smelled in the domain of nose consciousness
- 4) Taste an object tasted in the domain of taste consciousness
- 5) Tactile object an object experienced in the domain of touch consciousness

Eye consciousness and visual consciousness are equivalent; ear consciousness and auditory consciousness are equivalent; likewise with nose consciousness and olfactory consciousness; tongue consciousness and gustatory/taste consciousness; body consciousness and tactile/touch consciousness.

**Body consciousness** experiences tactile objects both within and outside of the body; thus it includes interoception.

**Forms:** When we categorize form along the lines of an ontology of what are experienced as basic visual objects, we observe two classes:

- 1) Shape *something reasonably identified as shape*
- 2) Color *something reasonable described as hue*

**Shapes:** further categorizing these along the lines of fundamental components of visual experience, we can compile a list of eight archetypal shapes:

- 1) long shape *a shape characterized by lengthiness*
- 2) short shape a shape characterized by shortness of breadth
- 3) high shape *a shape characterized by tallness*
- 4) low shape a shape characterized by shortness of height
- 5) round shape *a shape of orb-like quality*
- 6) cubed shape *a shape of box-like quality*
- 7) even shape a shape characterized by evenness or flatness
- 8) uneven shape a shape characterized by jaggedness or unevenness

**Colors:** these are categorized on the basis of whether the color is a mix of two other colors or not. Two different ways of understanding which colors are primary and which are secondary exist; in terms of additive color mixing and in terms of subtractive color mixing.

- 1) Primary color *something reasonably described as a primary hue*
- 2) Secondar color *something reasonably described as a secondary hue*

**Primary colors:** these require no mixing of other colors to make them, but differ depending on whether we're discussing colors of light or of pigments.

In additive color mixing (mixing light):

- 1) Red
- 2) Green
- 3) Blue

In subtractive color mixing (mixing pigments):

- 1) Blue
- 2) Yellow
- 3) White
- 4) Red

Secondary colors: are any colors created by mixing two or more other colors.

We can specify colors of certain natural phenomena in order to address misconceptions that can easily arise in relation to them. For instance, the colors of certain phenomena are visible from a distance but no longer visible as you move too close or shift your viewing angle, yet we still must acknowledge that they have color; thus, we can specify:

- 1) the color of clouds
- 2) the color of smoke
- 3) the color of dust
- 4) the color of mist

Likewise, the colors of some natural phenomena are only visible in relation to a solid object or an environment of objects, yet we must still acknowledge that they are not themselves the color of that solid object; thus, we can specify:

- 5) the color of light
- 6) the color of darkness
- 7) the color of sunrays
- 8) the color of shadows

**Sounds:** we can categorize sound according to various physical properties of the soundwaves, such as frequency and amplitude, which gives us the vocabulary of music and the dimensions of tone, pitch, harmony, resonance, etc. There are many different qualities of sound, but here the primary classification will be made in terms of the capacity of sounds to express semantic content – in other words, whether or not they have meaning.

- 1) Intelligible sound an object of hearing which creates an understanding of semantic content
  - o This is equivalent to speech sounds
  - Example the word "Hello!"
- 2) Unintelligible sound *an object of hearing which does not express a meaning* 
  - o This is equivalent to non-speech sounds
  - Example the sound of a babbling brook

**Smells:** many types of molecules can be transduced by olfactory neurons and experienced as smell; there is no known way of determining or classifying smells based on molecular structure. Smells must simply be categorized according to common convention, and in this regard, there is a classification into ten:

- 1) Fruity
- 2) Citrusy
- 3) Fragrant
- 4) Minty
- 5) Sweet
- 6) Nutty
- 7) Woody
- 8) Chemical
- 9) Pungent
- 10) Decaying

Since the human nose is very apt at distinguishing naturally occurring odors from man-made scents, we can simplify the above classification into:

- 1) Natural smells
- 2) Artificial smells

**Tastes:** like smells, tastes are classified according to common convention; there also appears to be some physical basis in the arrangement of sensory neurons in the tongue, as well as in the molecular structures of taste molecules, for distinguishing different tastes.

- 1) Sweet
- 2) Sour
- 3) Bitter
- 4) Spicy
- 5) Salty
- 6) Astringent

**Tactile objects:** by observing the fundamental elements of our tactile experience – and likewise, the primary features of emergent physical objects that are empirically evident to our sense of touch – we can see how the traditional understanding of "the four elements" accounts for a robust classification of tactile objects. They constitute the primary constituents of tactile and interoceptive experience and form the basis for other, secondary tactile objects.

- 1) The elements of tangibility
- 2) Derivative tactile objects

The elements of tangibility: these four elements are elementary in the sense that they are primary objects as experienced internally and externally by way of bodily sensations. Additionally, they can be identified as primary components of all macroscopic physical objects in terms of the characteristics that they embody. They are not primary elements in the same way that carbon, oxygen, lithium, etc. are primary elements. However, they are akin to the basic states of matter: solids, liquids, gases. The element of warmth is akin to the phenomena of heat and combustion.

- 1) The earth element *a thing that is hard and obstructive*
- 2) The water element *a thing that is wet and fluid*
- 3) The fire element *a thing that is hot and burning*
- 4) The air element *a thing that is light and moving*

Alternatively, the following categories can be used, with the same definitions as given above:

- 1) Solids
- 2) Liquids
- 3) Heat
- 4) Gases

**Derivative tactile objects:** these include a variety of objects experienced as sensations in the domain of bodily consciousness – some of them are solely

experienced interoceptively while others are experienced both interoceptively and via the nerve receptors on the outer surface of the skin.

- 1) Softness
- 2) Roughness
- 3) Heaviness
- 4) Lightness
- 5) Hunger
- 6) Thirst
- 7) Cold

#### Notes on the Colors

A basic categorization of colors into primary and secondary lines up with most presentations of color theory. In contemporary art and science, we distinguish between additive color and subtractive color. A list based on subtractive color is made by looking at how *pigments* mix and create other colors rather than how *light* mixes to create colors. Subtractive color is what we have when we're talking about color pigments and not colors of light itself. When we perceive the blue color of a solid object (as opposed to seeing raw blue light emitted directly from a light source) it appears blue because the pigments in the object absorb all light wavelengths other than blue and reflect the blue wavelength back towards our eyes.

This is called "subtractive" because the color we perceive results from wavelengths of light being absorbed or subtracted out – thus if we mix enough color pigments together, we will end up with a perception of a black color. All of the wavelengths of light get absorbed, so none are reflected and we just perceive black. Simply due to surface reflectance, and other phenomena such as fluorescence, there is still some light reflected off a black object – an object that entirely absorbed all light would be like a black hole!

Additive colors, on the other hand, don't rely on some wavelengths of light being absorbed and others reflected. It's the wavelengths of light themselves that we see, so when they're mixed they produce white light. So then, we can conclude that there is no such thing as black light. So how does the screen that you're looking at right now produce black, when the images on a screen are made from pure light being emitted?

# **Mindfulness Corner**

The Nalanda Tradition gives the tools for a systematic inquiry into the nature of human experience, aka human consciousness. How does the current chapter – with its focus on the external world – lead to deeper understanding of your own experience?

As you reflect on and debate about these material objects, keep track of the interesting questions and doubts that arise. Then challenge yourself to more attentively and deeply observe your own experience of the five types of external matter. Cultivate mindfulness by clearly perceiving each one in turn; observe visual forms, sounds, smells, tastes, and tactile objects. Observe each of these in relation to one object, such as a tree or flower. Recognize in your experience the difference between the raw data of sensory consciousness and the thoughts, that you have about an object. Distinguish the conception of an object – how it appears in your thoughts – from the naked appearance that is present in your sense consciousnesses.