Because communication is the essence of life

PRC

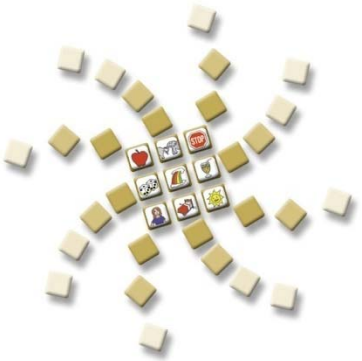
UNITY®

The Language Behind the Device

5 EASY PATTERNS

What is Unity®?

- A software program
- In all PRC devices
- A way to organize language with the goal of generative communication



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Unity is a registered trademark of Semantic Compaction Systems.

What is Minspeak®?

A way of organizing language.

http://www.minspeak.com/

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Minspeak is a registered trademark of Semantic Compaction Systems.

Three Ways of Organizing Language in AAC Devices

- Spelling and Word Prediction
- Single-Meaning Icons
- Multi-Meaning Icons (Minspeak)

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Alphabet Based Systems

- Spelling one letter at a time
  - Simple concept
  - Requires spelling skills
  - Slow – keystroke intensive
- Rate enhancements
  - Abbreviation expansion
    - Memory conflicts, letter conflicts
  - Word Prediction
    - Not a rate enhancement (counter intuitive)
    - Distracting

Single-Meaning Pictures

- Each word requires a picture
- Easy concept to understand
- Most words are not picture producers
  - Requires training (Try to use without words.)
- Each picture means one word
  - Not natural (Romski & Sevcik)
- Severe organizational issues
  - (Three year olds have a vocabulary of over 1,000 words.)

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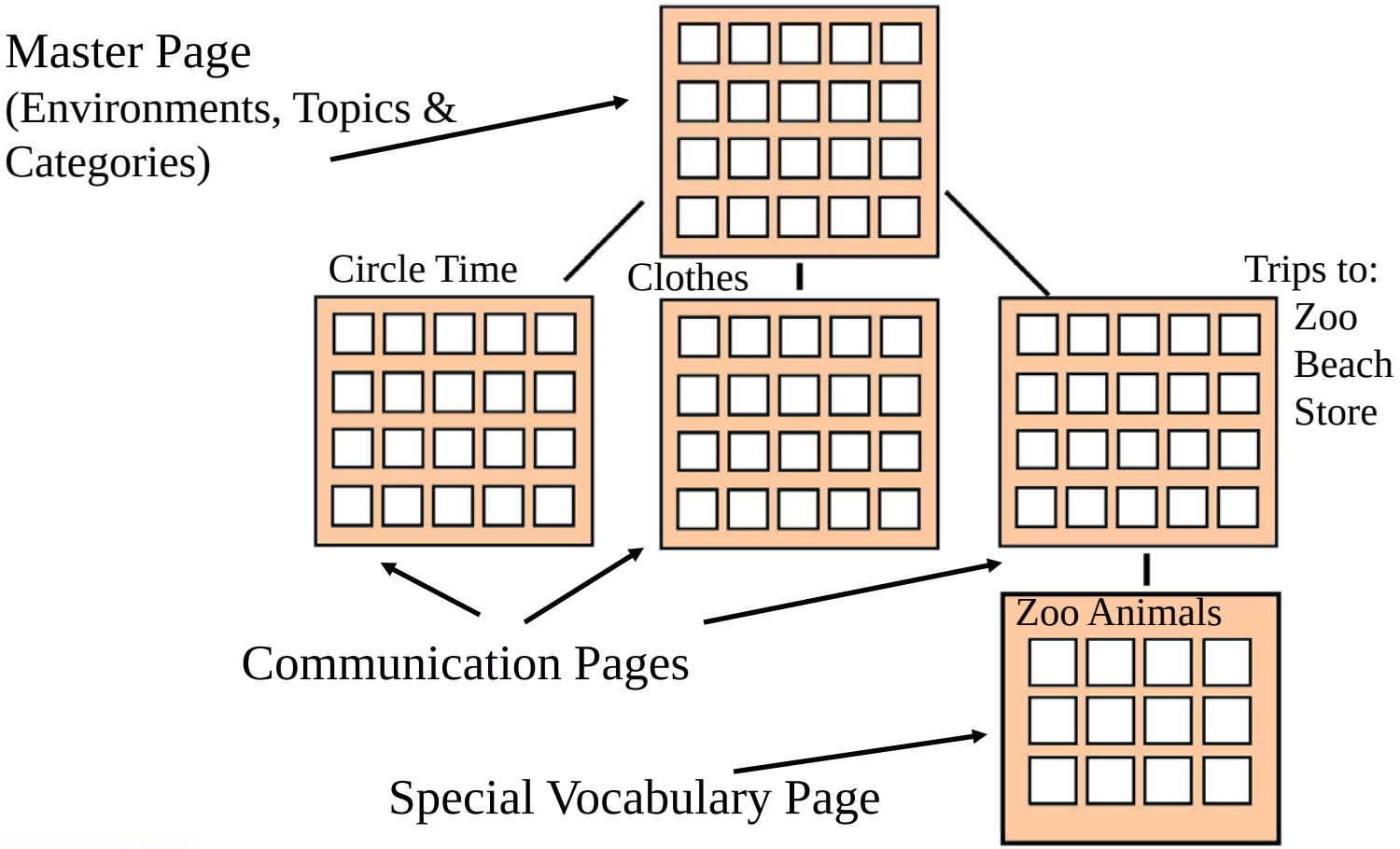
How page-based systems work…



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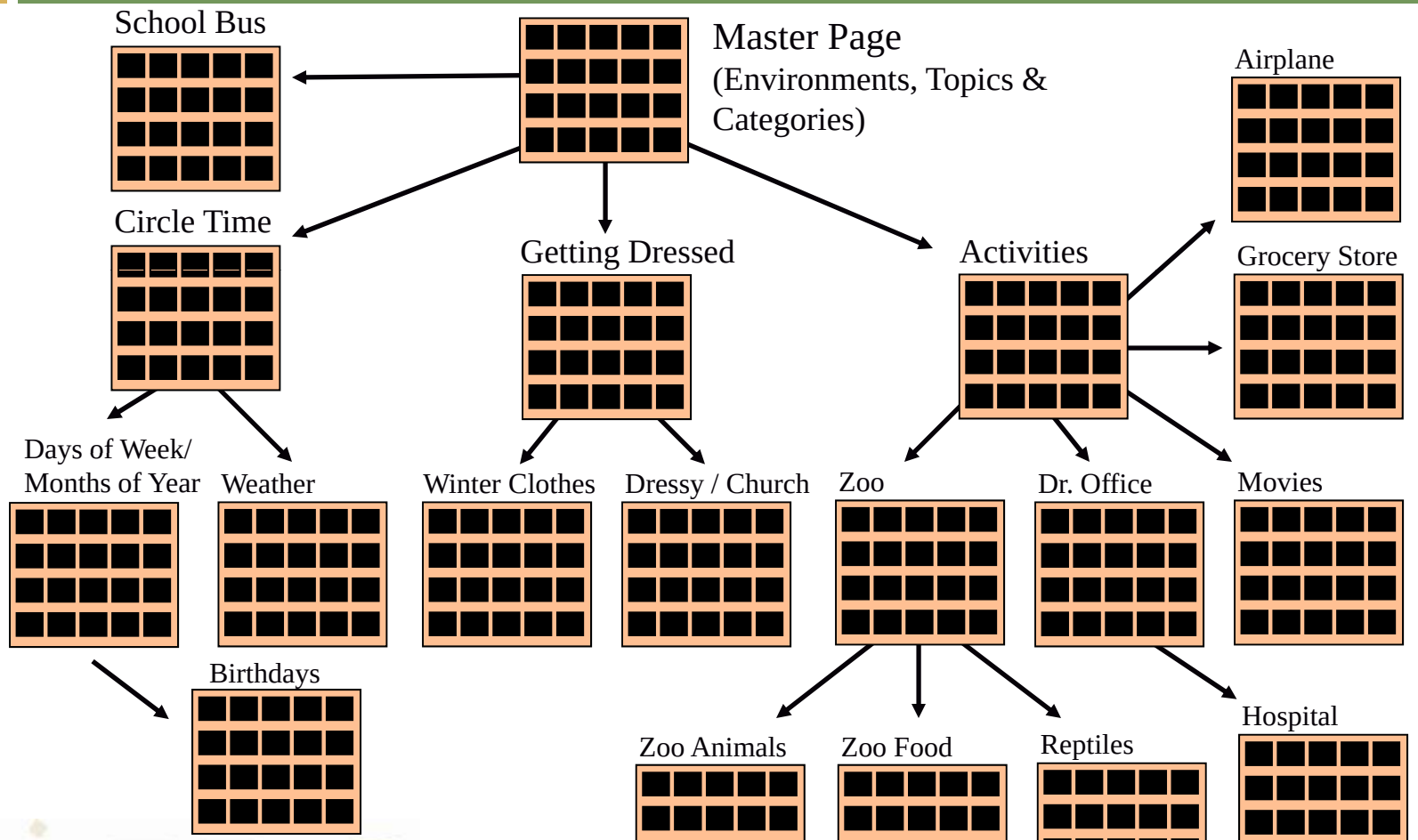
How page-based systems work after a few months…



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PRC provides all three language representation methods:

- Spelling and Word Prediction
- Single-meaning Icons
- Unity (Minspeak)
  - A finite set of multi-meaning icons
  - Combined in short 2-3 hit sequences
  - To quickly access a large core and fringe vocabulary

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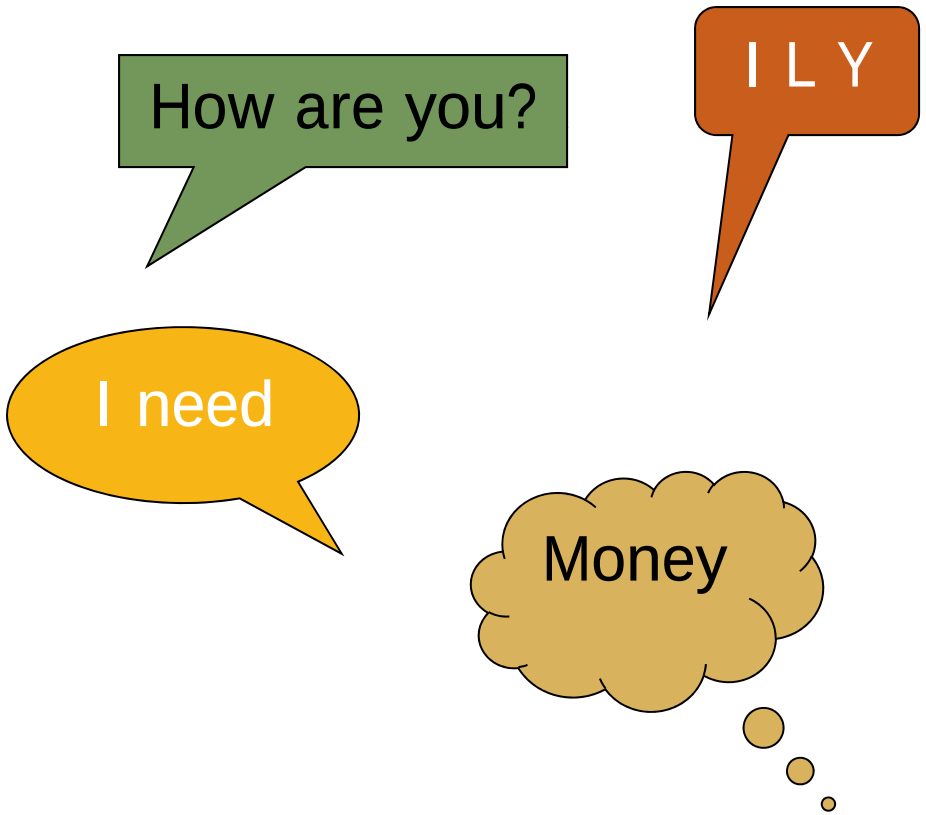
Effective Communication Requires:

- Sentences
- Phrases
- Words
- Letters



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All Words are NOT Created Equal

hibernate

who

up

is

have

Paul Revere

about

do

Jupiter

a

want

cylinder

scaffolding

down

am

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Core vs. Fringe

hibernate

who

up

is

have

Paul Revere

about

do

Jupiter

a

want

cylinder

scaffolding

down

am

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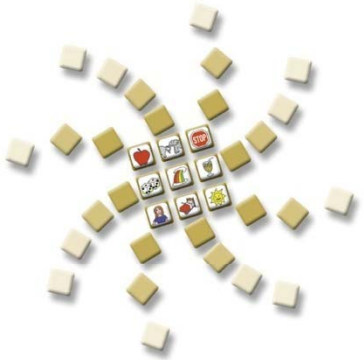
Generative Language is Based on Core Words

- 80% of what we say throughout a day comes from a small bank of 400-500 CORE words
- 20% of what we say comes from a bank of thousands of FRINGE words

Vanderheiden & Kelso (1987)



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Core vs. Fringe

Core

- small number of words
- used for most messages
- usable across many situations
- applicable to children and adults

Fringe/Activity-Specific

- large, huge number of words
- mostly nouns
- infrequently used

Example

- Can we go to Starbucks© to get a latte?

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Toddler Vocabulary Arranged by Frequency

- Twenty-six core words

shown here comprise 96.3% of the total words used by toddlers. How many of these words are commonly seen on language boards?

Words	Percentage
I	9.5
No	8.5
Yes/yea	7.6
My	5.8
The	5.2
Want	5.0
Is	4.9
It	4.9
That	4.9
A	4.6
Go	4.4
Mine	3.8
You	3.2
What	3.1
On	2.8
In	2.7
Here	2.7
More	2.6
Out	2.4
Off	2.3
Some	2.3
Help	2.1
All done/finished	1.0

Banajee, DiCarlo & Stricklin, (AAC 2003)

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Where to find CORE and FRINGE…

UNITY sequenced vocabularies include many words:

Unity 60 Sequenced

core = 2,000 + words (includes derivatives)

activities = 2,000 + words

pages = 2,500 + words

Unity 84 Sequenced

core = 3,000 + words (includes derivatives)

activities = 3,000 + words

pages = 700 + words

Unity 144 Sequenced

core = 7,000 + words includes derivatives)

activities = 2,000 + words

pages = 300 + words

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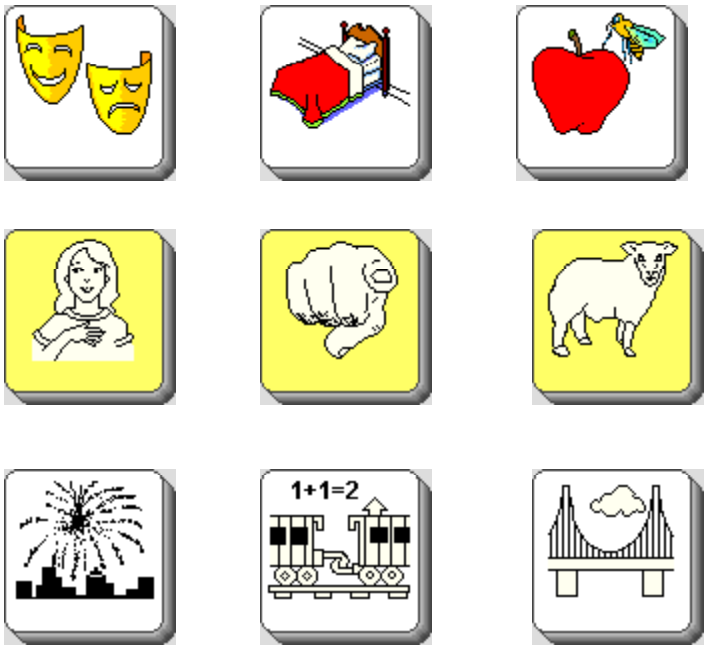
A little background…

- What are **core icons**?
  - They are the icons that have a white background and colored symbols.
- What do **pronouns** look like?
  - They have a yellow background with a black/white symbols.
- What do **grammar labels** look like?
  - They have a white background with a black symbol.
- Where are **nouns** located?
  - In the activity row.



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The Color Code

- Green = verb

- Blue = adjective

- Orange = noun category

- Yellow = pronoun

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The 5 Patterns…

- Now it is time for some hands on practice with the 5 patterns of UNITY!
  - Pattern 1- Core Icon + Green/Blue/Orange
  - Pattern 2- Pronouns
  - Pattern 3- Pronoun Phrases
  - Pattern 4- Nouns
  - Pattern 5- Grammar Label + Core Icon

Pattern 1 - Core Icon + green/blue/orange

Pattern 1- Core Icon + green/blue/orange

(embellished icons on)

2nd hit: green, blue or orange

1st hit: core icon

verb

adjective

noun category

“eat” “hungry” “food”

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Pattern 1- Core Icon + green/blue/orange

(embellished icons on)

2nd hit: green, blue or orange

verb

adjective

noun category

1st hit: core icon

“sleep” “tired” “furniture”

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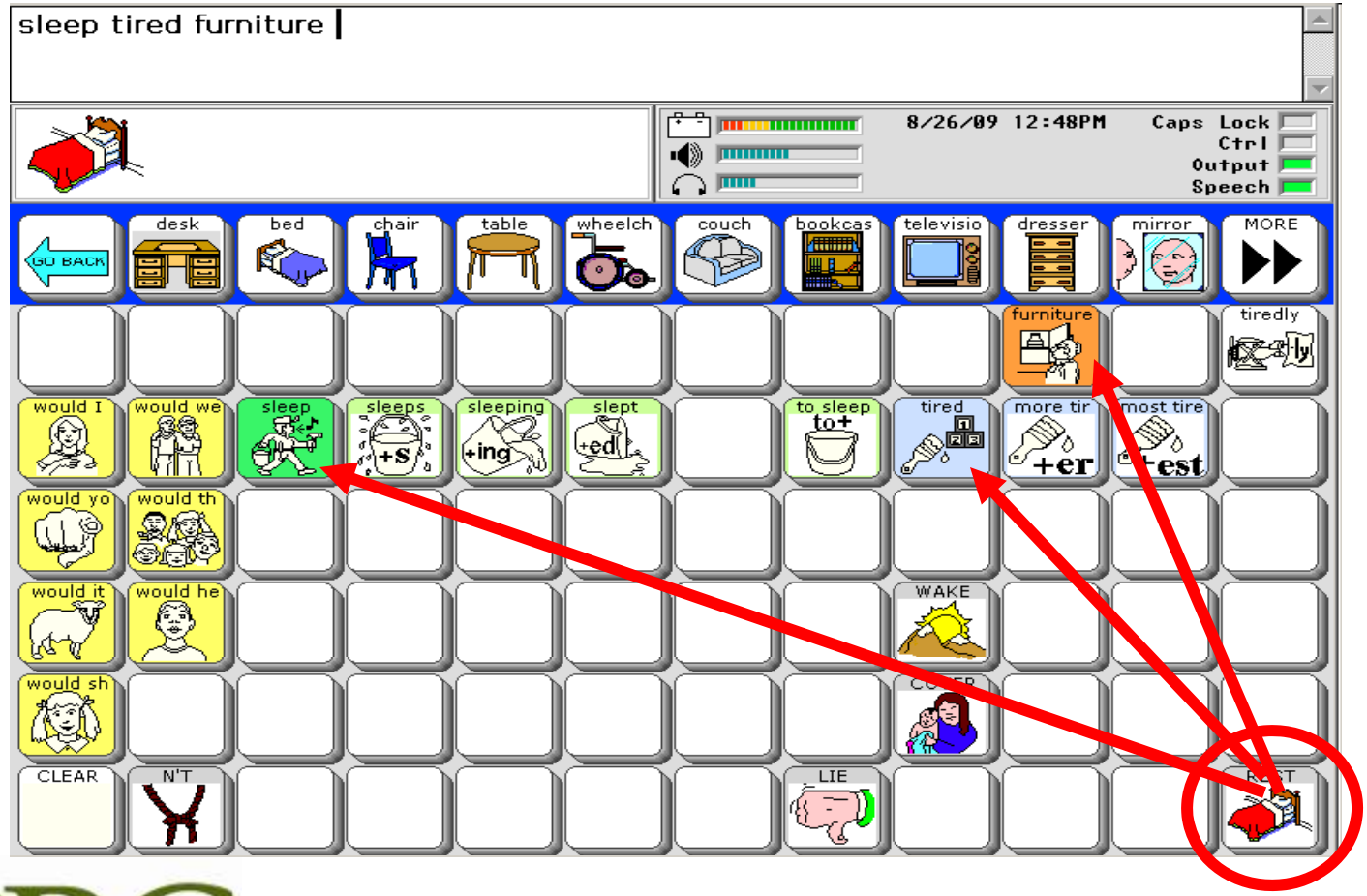
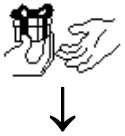
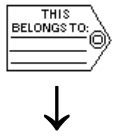
Pattern 1 - Core Icon + green/blue/orange



Pattern 2: Pronouns

Subject	Object	 Reflexive	Possessive Adjective	 Possessive Pronoun
I	me	myself	my	mine
you	you	yourself	your	yours
he	him	himself	his	his
she	her	herself	her	hers
it	it	itself	its	its
we	us	ourselves	our	ours
they	them	themselves	their	theirs

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Pattern 2: Subject Pronouns

Double hit on the same key

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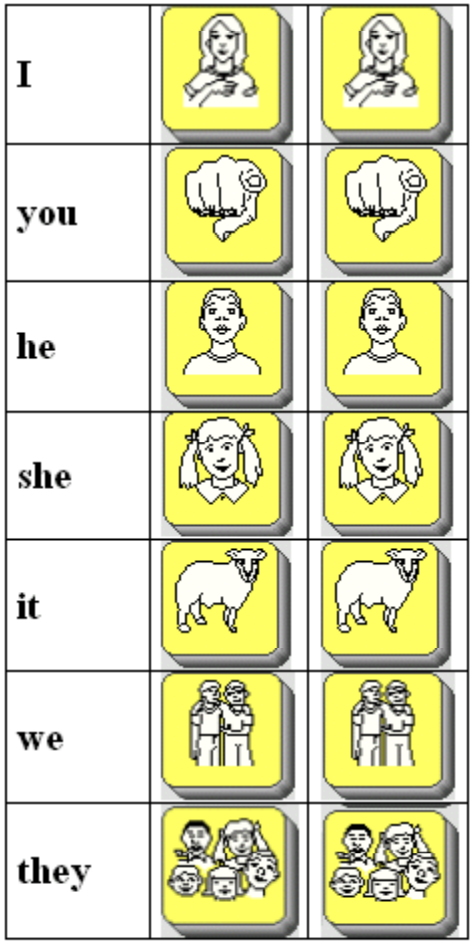
Pattern 2: Subject Pronouns



Double hit on the same key

Pronouns

Subject	Object ↑	Reflexive ↓	Possessive Adjective ↑	Possessive Pronoun ↓
I	me	myself	my	mine
you	you	yourself	your	yours
he	him	himself	his	his
she	her	herself	her	hers
it	it	itself	its	its
we	us	ourselves	our	ours
they	them	themselves	their	theirs

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Pattern 2: Object Pronouns

Hit the pronoun then the object key

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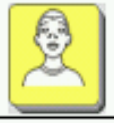
Pattern 2: Object Pronouns

Me		
You		
Him		
Her		
It		
Us		
Them		

Hit the pronoun key then up to the object key.

Pronouns

Subject	Object	Reflexive	Possessive Adjective	Possessive Pronoun
I	me	myself	my	mine
you	you	yourself	your	yours
he	him	himself	his	his
she	her	herself	her	hers
it	it	itself	its	its
we	us	ourselves	our	ours
they	them	themselves	their	theirs

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Pattern 2: Reflexive Pronouns

Hit the object key then the pronoun

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Pattern 2: Reflexive Pronouns

myself		
yourself		
himself		
herself		
itself		
ourselves		
themselves		

Hit the object key then down to the pronoun key.

Pronouns

Subject	Object ↑	Reflexive ↓	Possessive Adjective ↑	Possessive Pronoun ↓
I	me	myself	my	mine
you	you	yourself	your	yours
he	him	himself	his	his
she	her	herself	her	hers
it	it	itself	its	its
we	us	ourselves	our	ours
they	them	themselves	their	theirs

Pattern 2: Possessive Adjective Pronouns

Hit the pronoun then the possessive key

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Pattern 2: Possessive Adjective Pronouns

My		
Your		
His		
Her		
Its		
Our		
Their		

Hit the pronoun then the possessive key.

Pronouns

Subject	Object	Reflexive	Possessive Adjective	Possessive Pronoun
I	me	myself	my	mine
you	you	yourself	your	yours
he	him	himself	his	his
she	her	herself	her	hers
it	it	itself	its	its
we	us	ourselves	our	ours
they	them	themselves	their	theirs

Pattern 2: Possessive Pronouns

Hit the possessive key then the pronoun

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Pattern 2: Possessive Pronouns

Mine		
Yours		
His		
Hers		
Its		
Ours		
Theirs		

Hit the possessive key then down to the pronoun key.

Pronouns

Subject	Object ↑	Reflexive ↓	Possessive Adjective ↑	Possessive Pronoun ↓
I	me	myself	my	mine
you	you	yourself	your	yours
he	him	himself	his	his
she	her	herself	her	hers
it	it	itself	its	its
we	us	ourselves	our	ours
they	them	themselves	their	theirs

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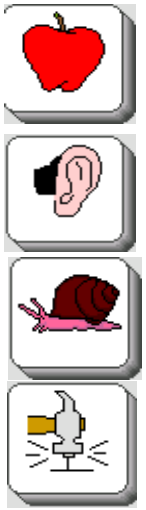
Pattern 2: Indefinite Pronouns

- Start with . . .
  - any
  - every
  - some
  - no



- End with . . .
  - time
  - body
  - how
  - more
  - one
  - thing
  - way
  - where

(In Unity 60, all indefinite pronouns are located under the wizard)

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Pattern 2: Indefinite Pronouns

Unity 84 sequenced

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Pattern 3: Pronoun Phrases

- Declarative statements
  - "I can", "You like", "He feels", "She wants" etc.
- Negative declarative statements
  - "I can't", "You don't like", "He doesn't feel", "She doesn't want" etc.
- Questions
  - "Can I?", "Do you like?", "Does he feel?", "Does she want?" etc.
- Negative questions (often used in "why" questions)
  - "Can't I?", "Don't you like?", "Doesn't he feel?", "Doesn't she want?"

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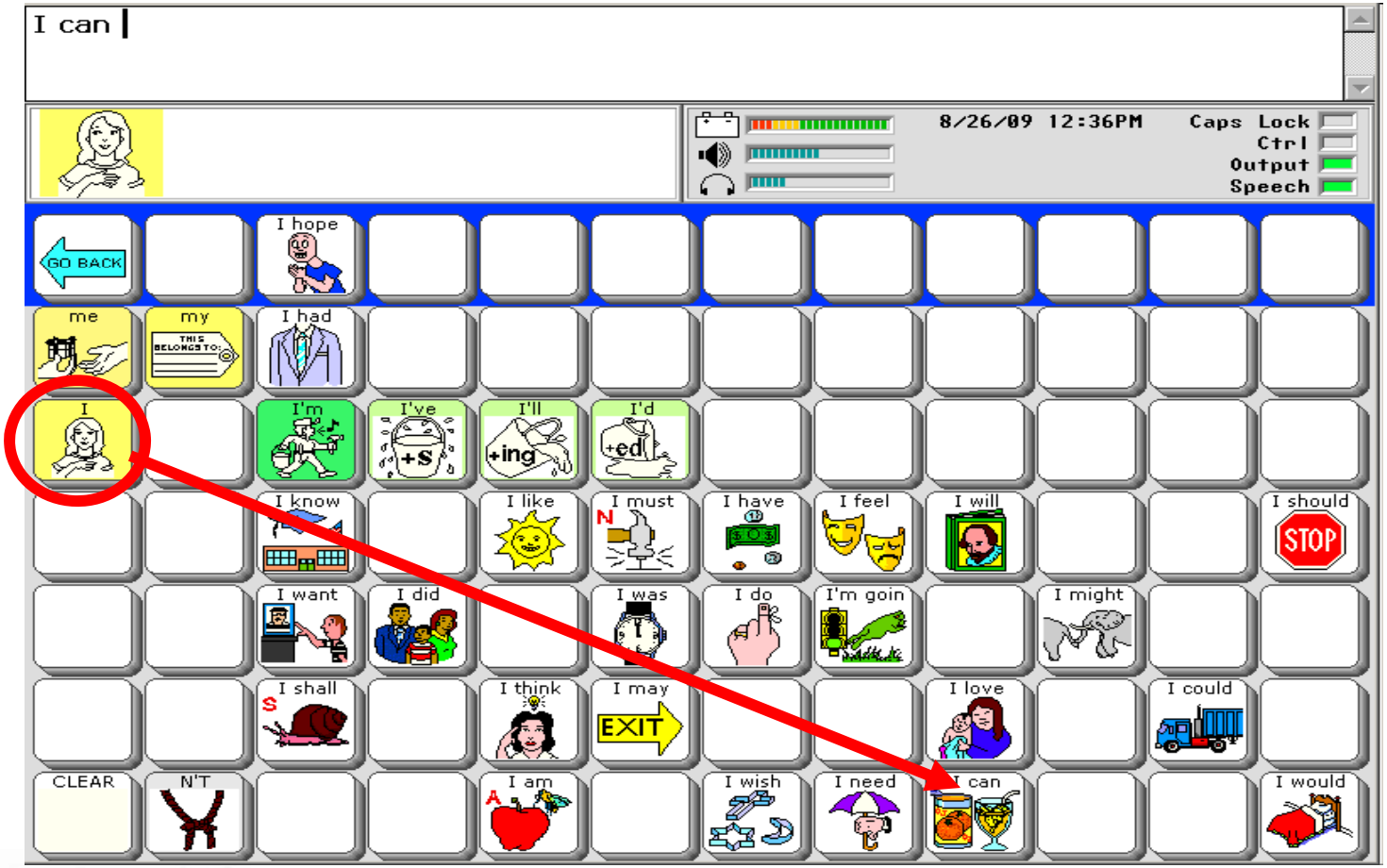
Pattern 3: Declarative Statements

Hit the pronoun then the core icon for the pronoun phrase



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Pattern 3: Declarative Statements

	pronoun	+	category icon
I can			
You like			
He feels			
She wants			

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Pattern 3- Negative Declarative Statements

1. Hit the pronoun
2. Select the KNOT icon.
3. Select the core icon for the pronoun phrase

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Pattern 3: Declarative Statements

pronoun + not + category icon

I can't

You don't like

He doesn't feel

She doesn't want

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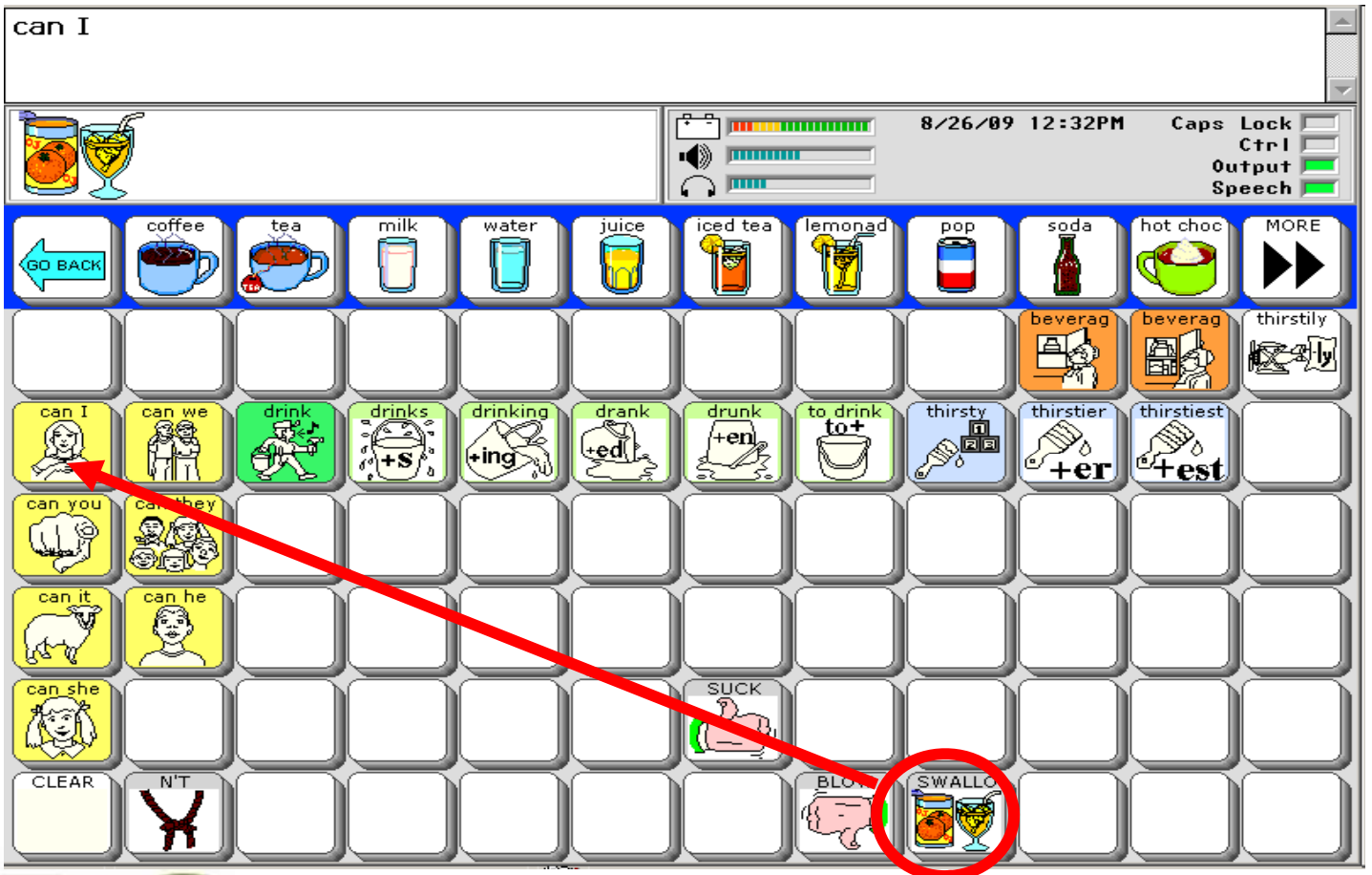
Pattern 3: Question Form

Reverse the sequence:

1. **Select the core icon**
2. **Select the pronoun**



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Pattern 3: Question Form

	category icon	+	pronoun
Can I?			
Do you like?			
Does he feel?			
Does she want?			

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Pattern 3- Negative Questions

Reverse the sequence:

1. **Select the core icon.**
2. **Select the KNOT.**
3. **Select the pronoun**

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Pattern 3: Negative Questions

	category icon	+	not	+	pronoun
Can’t I?		+		+	
Don’t you like?		+		+	
Doesn’t he feel?		+		+	
Doesn’t she want?		+		+	

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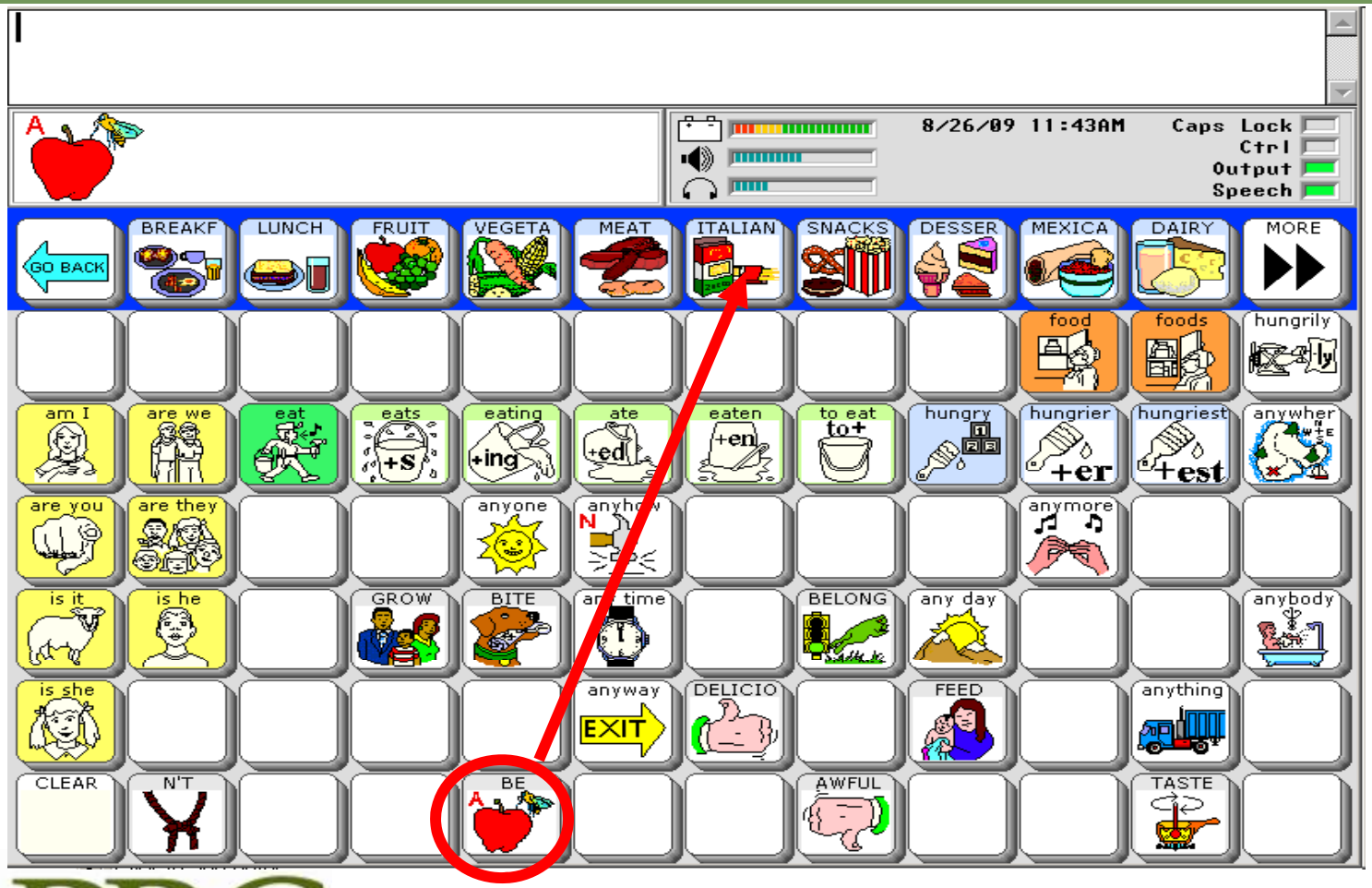
Pattern 4: Nouns



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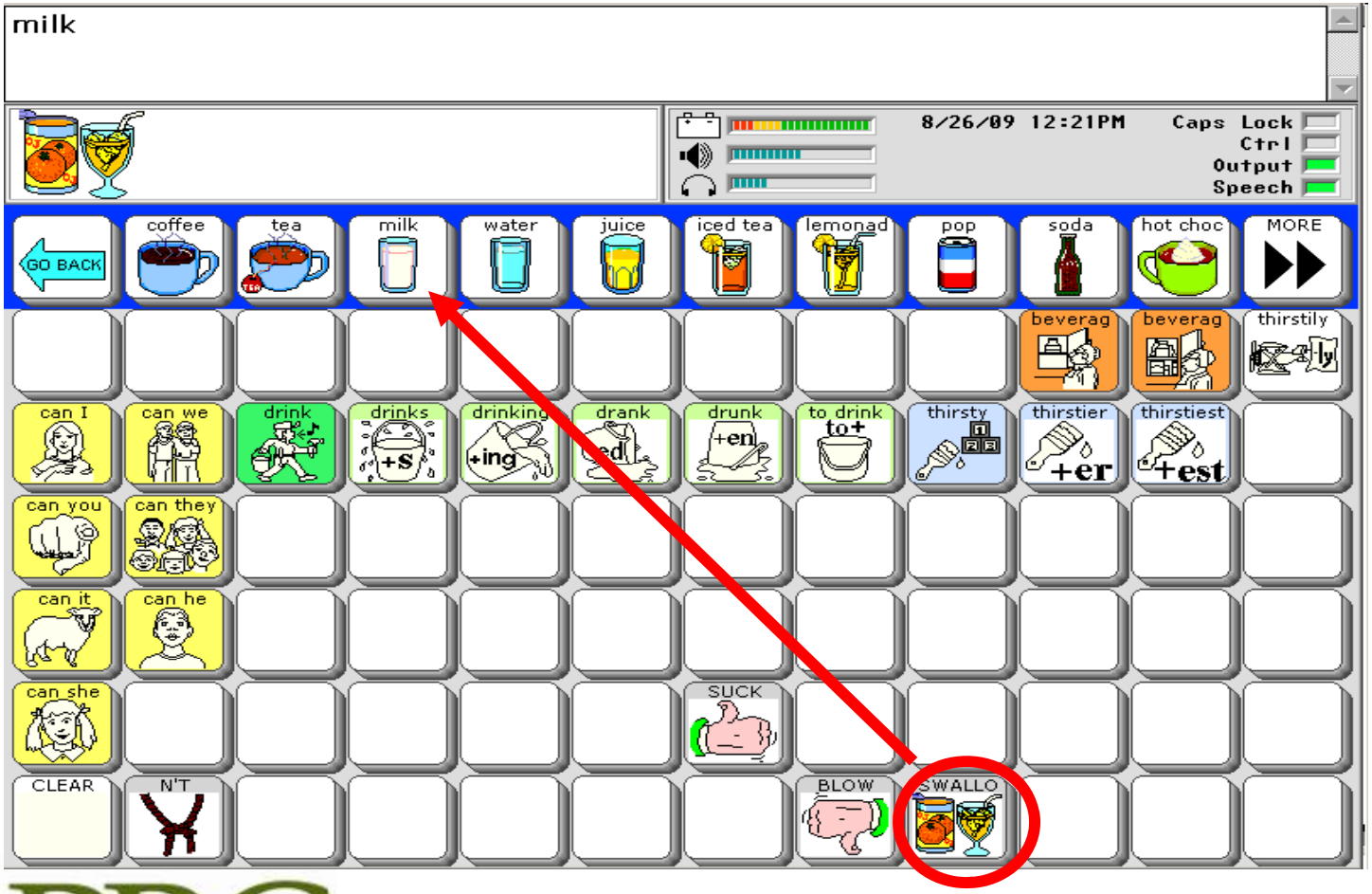
Pattern 4: Nouns



Pattern 4: Nouns

core icon
+
activity row

Icon	Activity Label	Possible Activities in the Row
	Games	*card, dice, bingo, checkers*
	Feelings	*happy, sad, excited, bored, mad*
	Books	*notebook, comic, journal*
	Music and Instruments	*song, album, cassette, CD piano, guitar, drum, cymbal*
	Family	*mom , dad, (add names of siblings)*
	Nature	*grass, tree, flower, garden, yard*
	Colors	*red, orange, yellow, blonde, brunette, redhead*
	Food	*fruits, vegetables, meats, snacks*
	Holidays	*vacation, birthday, Valentine's Day, St. Patrick's Day*
	Weather	*sunny, cloudy, rainy, windy*
	Drinks	*milk, water, juice, iced tea*

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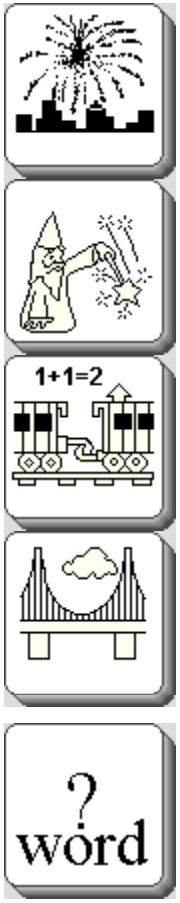
Pattern 5- Grammar Label + Category Icon



- Interjections
  - “please”, “awesome”, “hello”, “goodnight”
- Determiners
  - “this”, “that”, “these”, “those” etc.
- Conjunctions
  - “and”, “but”, “because”, “or” etc.
- Prepositions
  - “in”, “on”, “under”, “off”, “at” etc.
- Question words
  - “who”, “what”, “where”, “when”, “how” etc.

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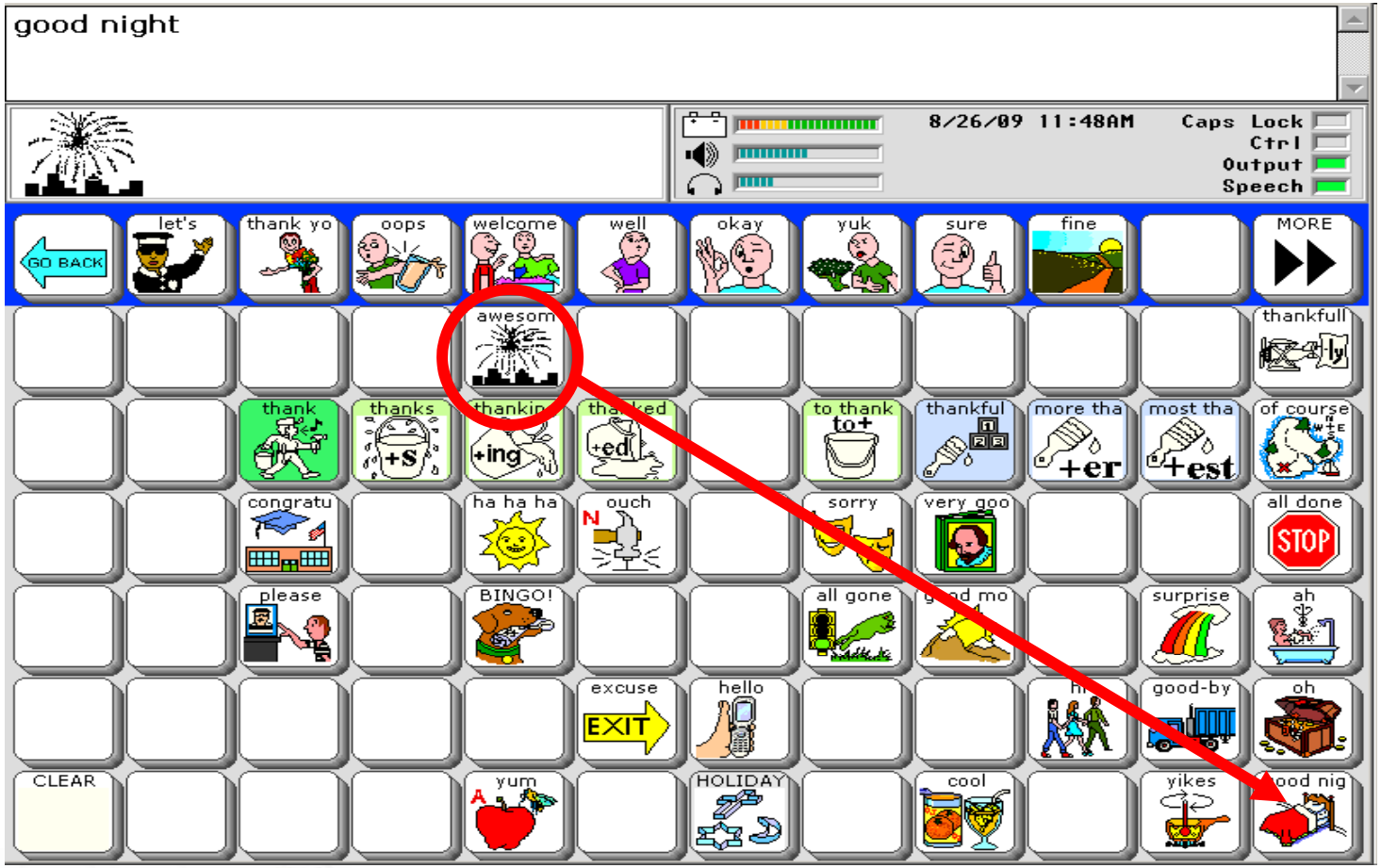
Pattern 5: Interjections!



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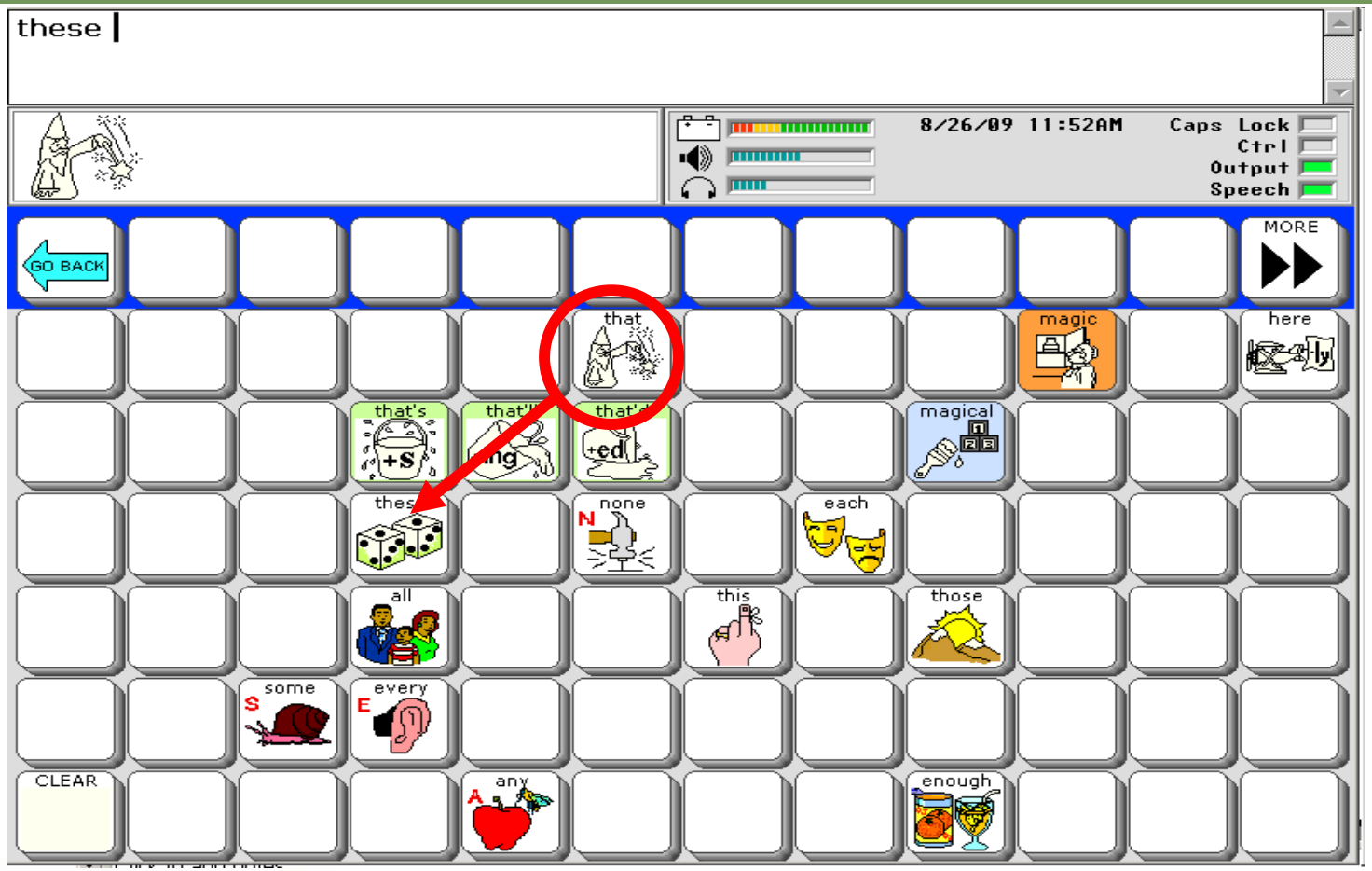
Pattern 5: Determiners



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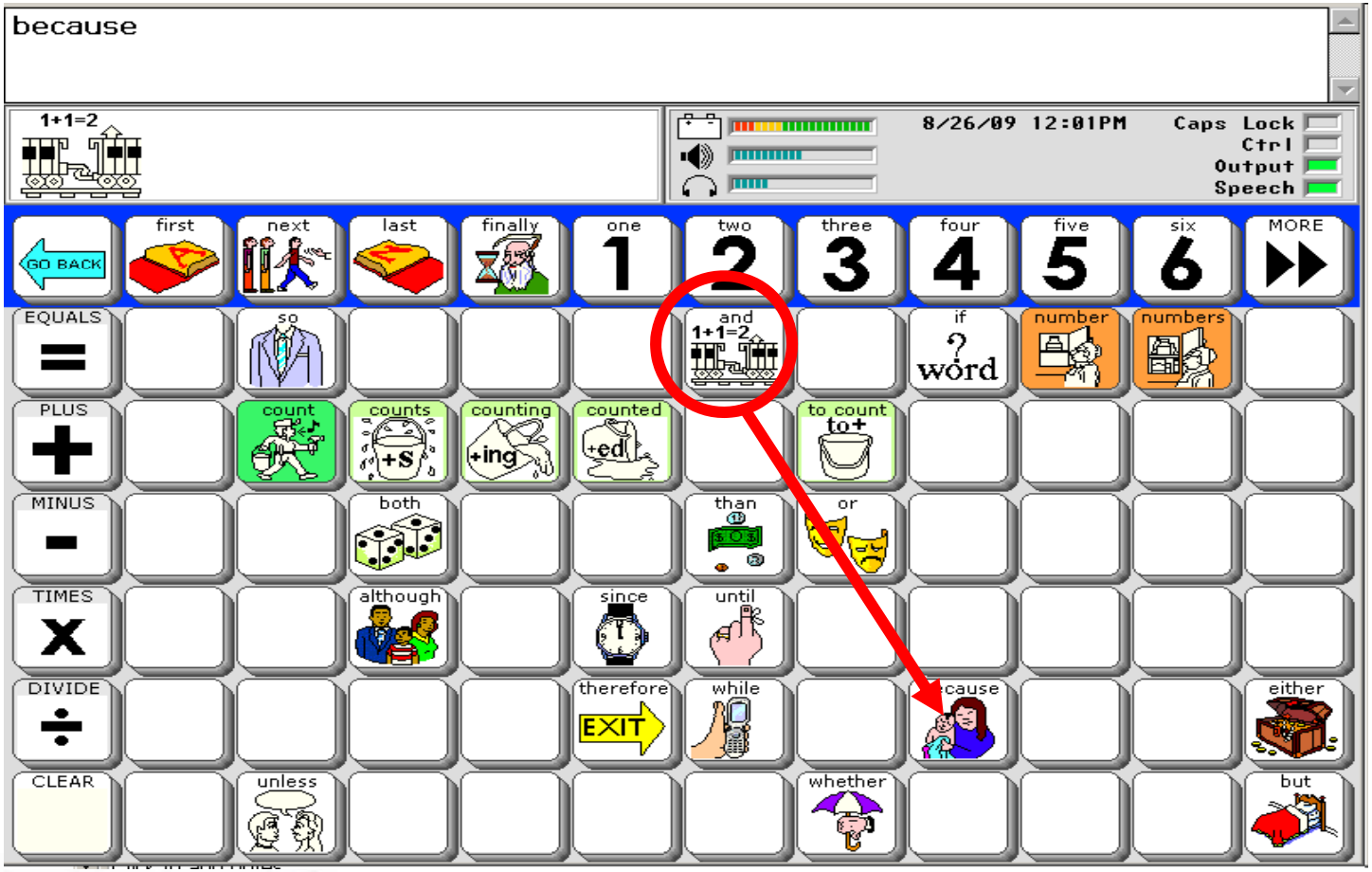
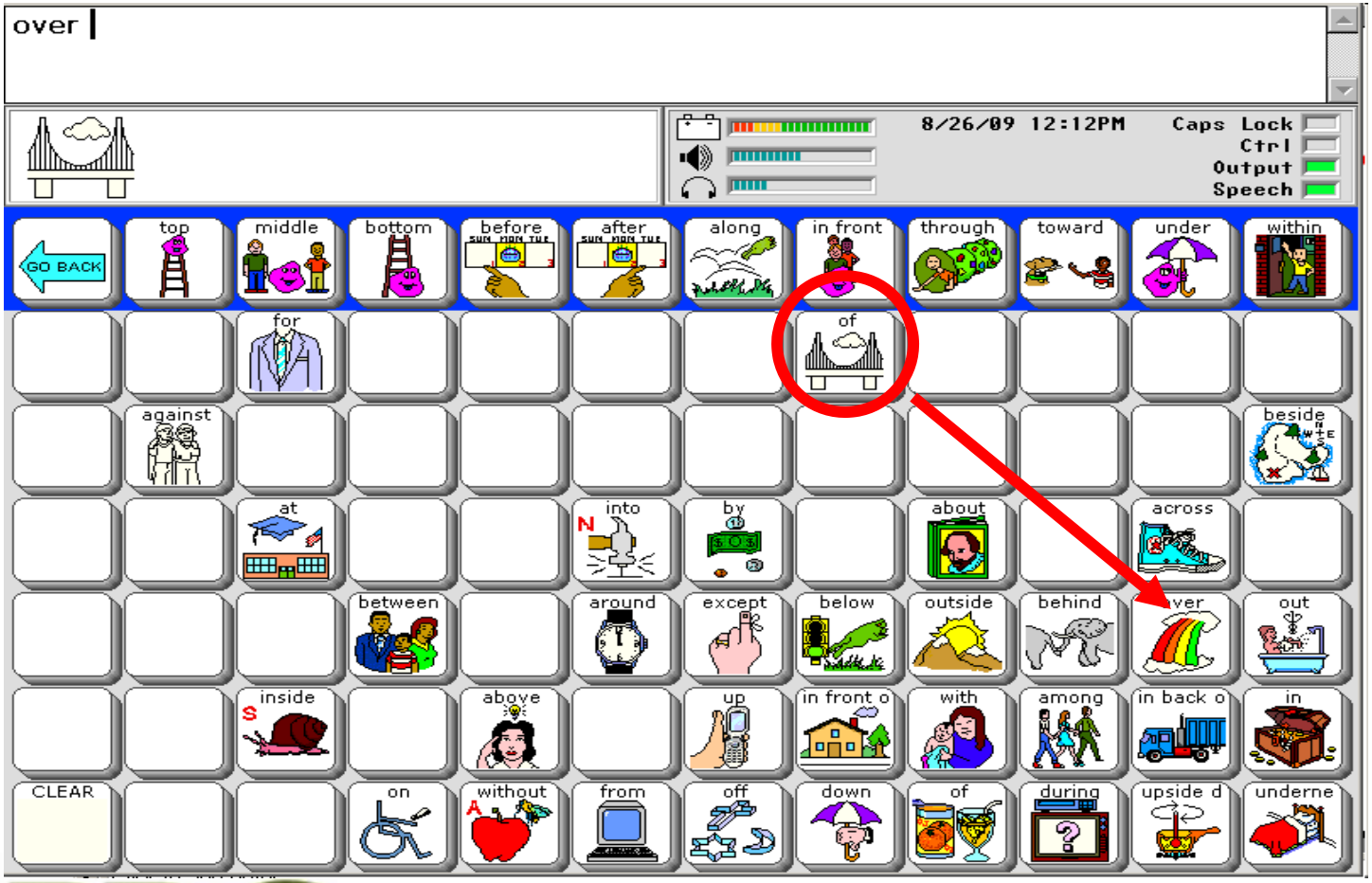
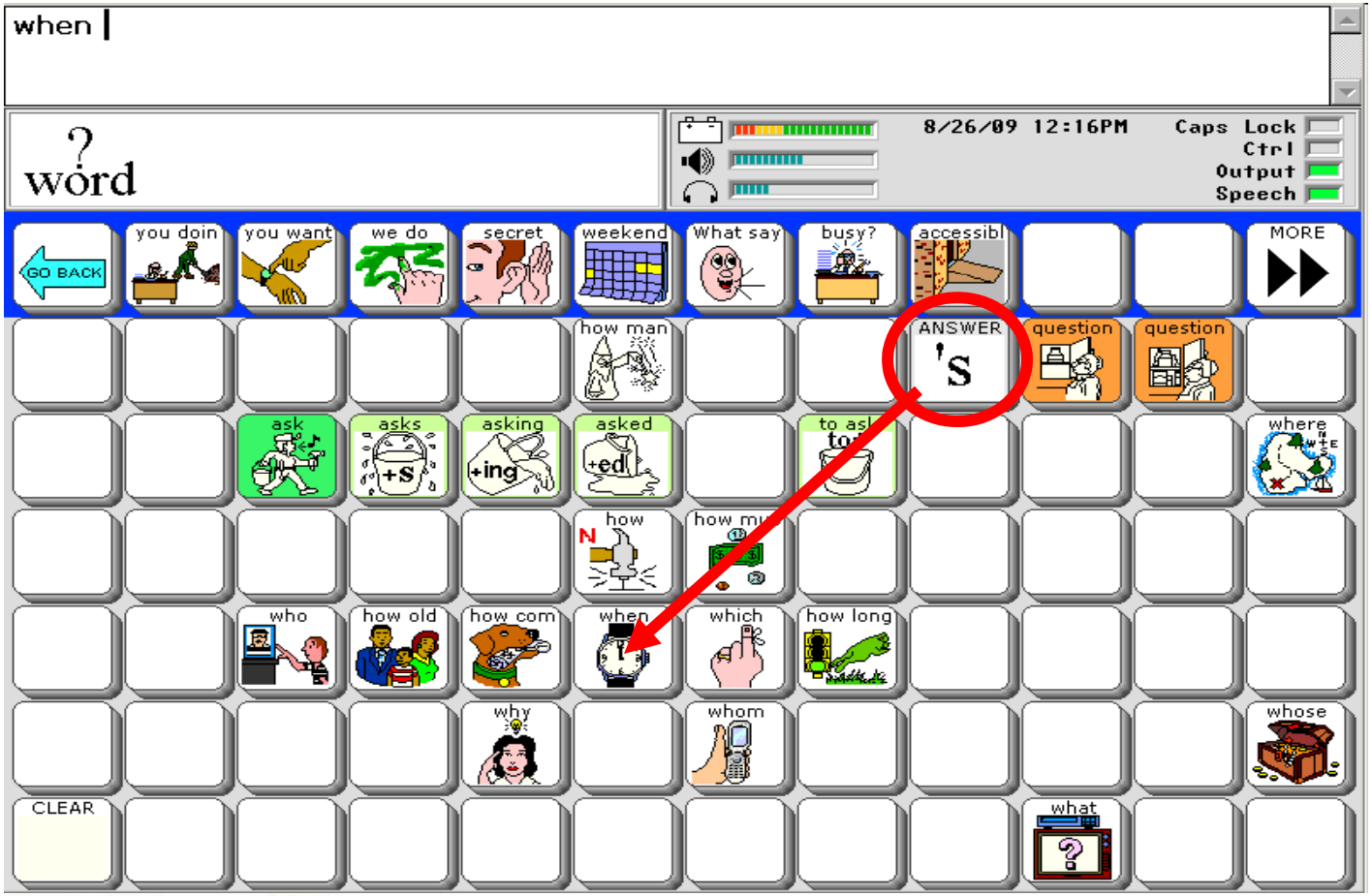
Pattern 5: Conjunctions



Pattern 5: Prepositions



Pattern 5: Question Words



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Good idea.

I'm finished!

Quick Words and Phrases

Little words:
a, on, is

What I want to say
is not in my device.

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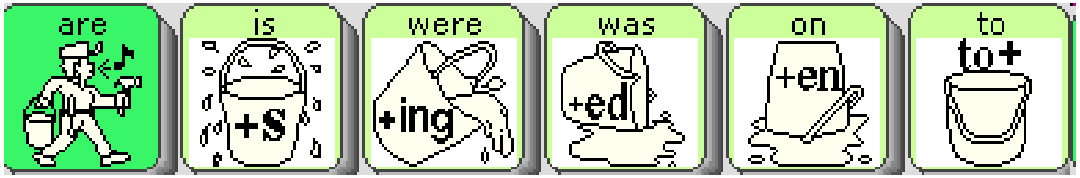
One-Hit Quick Words in Unity

- Coded with one icon
- Used <u>frequently</u>
- And said <u>quickly</u>



are is were was on to

not an the a + s

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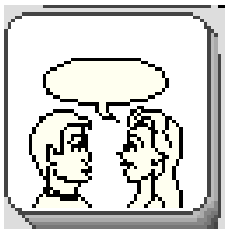
(“are” and “on” are excluded as one-hit words from Unity 60)

Quick Phrases



- In Unity 84/144, quick phrases are stored under this icon.

- In Unity 60, look under this icon.

(Look out for these sub-categories in the activity row as well.)

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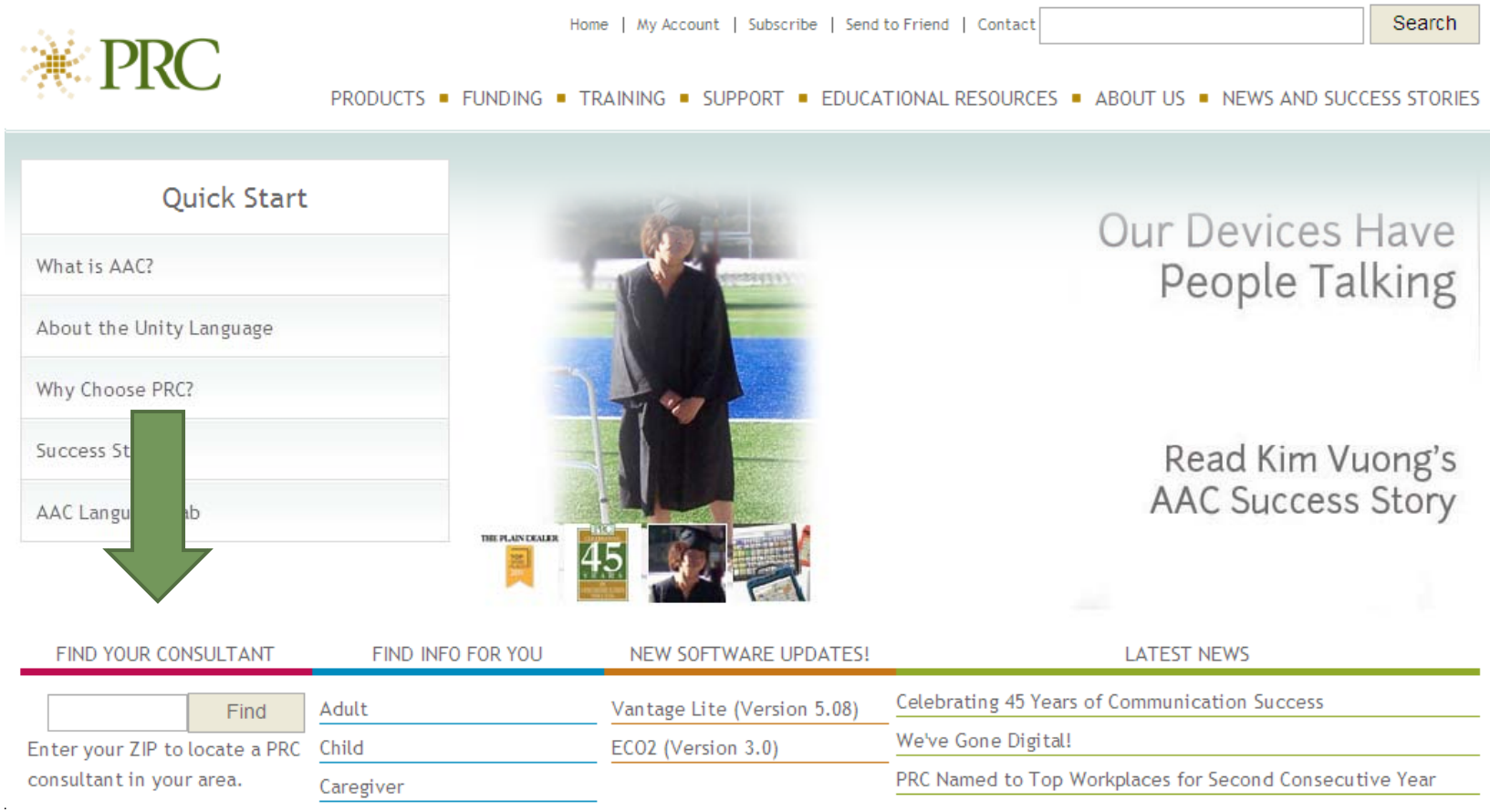
To find your local consultant…



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www.prentrom.com

UNITY® Resources!

AAC Language Lab

http://www.aaclanguagelab.com

The Center for AAC&Autism™
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http://www.aacandautism.com

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Thank you!

Learn about new training opportunities and connect with other AAC users

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