Bicycle Copy Scoring © PRT

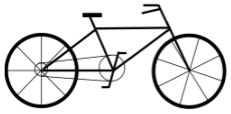
Revision F 10.25.2020

Name _____ Age _____ Gender _____ Ed _____ Date _____ Diagnosis _____

INSTRUCTIONS Provide pencil with eraser. Say, "**Copy the bicycle <u>exactly</u> as shown in the space below it. Make it the best copy you can and tell me when you are done. Go."** Start timing. End timing when drawer indicates the copy is done or is obviously finished.

SCORING 1 point for each correct item. If in doubt about a part ask the drawer to identify it when they are finished.

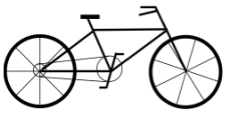
LEFT
Side of Bicycle



Element	Criteria	1 or 0
	1. **Left wheel is present** (shape not penalized)	
	2. **Left wheel is appropriately drawn** Rounded and not misshapen (i.e., largest diameter is not more than 2/3 larger than its smallest diameter), no distinct angles, wheel circle is enclosed with no more than ¼ inch line overshoot or undershoot	
	3. **Left wheel is appropriately proportioned** Wheel size is in proportion to bicycle as in model (e.g., top of tire almost even with top frame, right side of tire approximately bisects lower frame segment)	
	4. **7 spokes present** Two vertical, 1 horizontal on left and 4 angled. The rightmost horizontal spoke is behind the lower segment of the frame	
	5. **Rear chain ring is present (i.e., small inner circle in center of left wheel)**	
	6. **Chain positioned on top and bottom of rear chain ring**	
	7. **Left lower angle in left triangle of frame is appropriately drawn and connected** • Lower bar is approximately horizontal • Angle in middle of left tire is about 45 degrees • Angle in left triangle is connected near center of wheel (1.5 mm deviation allowable)	
	Total	/ 7

RIGHT
Side of Bicycle

Element	Criteria	1 or 0
	1. **Right wheel is present** (shape not penalized)	
	2. **Right wheel is appropriately drawn** Rounded, not misshapen (i.e., largest diameter is not more than 2/3 larger than its smallest diameter), no distinct angles, circle is enclosed with no more than 6 mm line overshoot or undershoot	
	3. **Right wheel is appropriately proportioned** Wheel size is in proportion to bicycle as in model (e.g., top of tire almost even with top frame of bicycle)	
	4 **8 spokes present and all are slightly angled**	
	5. **Handlebar is present and consists of horizontal top bar and a slightly angled lower bar. Handlebar is connected to a short steering shaft bar that is slightly angled towards the front wheel center, as in model**	
	6 **Bar extending from handlebars terminates within 1.5 mm of front wheel center** (the bar does not terminate on the tire)	
	7. **Front steering bar (from wheel center to handlebar) slightly angled as in model**	
	8. **Right upper angle in frame is appropriately drawn and connected** • Upper bar is approximately horizontal • Angle near front tire is about 45 degrees • Angle in right triangle is connected to handlebar frame just above tire	
	Total	/ 8

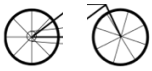
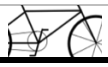


CENTER of Bicycle

Element	Criteria	1 or 0
	1. **Two pedals are present as in model**	
	2. **Pedals are connected by a single line from left end of top pedal to right end of lower pedal**	
	3. **The bar connecting the pedals is slightly angled as in model**	
	4. **Center sprocket ring is a simple round circle, positioned and sized as in model**	
	5. **Chain is attached to top and bottom of center sprocket wheel (not more than 1.5 mm gap)**	
	6. **Seat is present and horizontal as in model**	
	7. **Seat is positioned on a bar that is slightly angled and connected to middle of sprocket wheel, as in model**	
	8. **Frame parallelogram shape is formed with middle bar (supporting seat) bisecting parallelogram into two approximately equal triangles**	
	9. **Lower frame parts converge within 1.5 mm of sprocket wheel ring center**	
	Total	/ 9

Bicycle Copy Scoring Summary

Section	Raw Score
Left side of bicycle	/ 7
Right side of bicycle	/ 8
Center of bicycle	/ 9
Total score max = 24	/ 24
Time to completion	

Compulsivity / Effort Indicators A drawing that is done without regard to accuracy, or when an individual tries to display impairment, will yield scores that do not reflect the individual's drawing skills on the test. The following items may help identify questionably valid drawings given that a well-executed copy requires attention to the following details. Higher scores reflect better attention to detail and likely better effort.		1 pt if present
	1. Left wheel has spokes oriented at 12 o'clock, 6 o'clock and 9 o'clock (3 o'clock spoke is hidden by frame section)	
	2. All spokes in the right wheel are slightly angled	
	3. 7 spokes in left wheel and 8 spokes in right wheel	
	4. Spoke adjacent to handlebar shaft in right wheel is drawn slightly to the left of the front handlebar shaft	
	5. Spoke adjacent to left side of frame is slightly offset as in model	
	6. Pedal bar is slightly angled and a continuous line connects both pedals as in drawing	
	7. Pedals have horizontal orientation similar to top of bicycle frame	
	8. Lower segment of chain has similar horizontal orientation as top of bicycle frame	
	9. Upper segment of chain angles slightly down from right to left compared to lower chain	
	10. Front steering bar slightly angled and is approximately parallel to bar supporting seat as in model	
	Total	/ 10

Neurobehavioral Indicators

These Neurobehavioral Indicators are presented to aid in clinical hypothesis generation.

Clinical Sign	Suggested Interpretations
☐ Reversal of drawing from model	• Oppositional behavior • Impulsive style (drawer glances at model and draws object according to internal representation and then disregards model) • Neurological disorder
☐ Constricted size (much smaller than model)	• Anxiety • Personality Disorder
☐ Hastily sketched despite instructions to do best	• Low motivation • Oppositional • Trying to appear impaired
☐ Added details such as hand grips, brake parts, lights, valves, tire treads	• Anxious • Compulsive • Greater than average familiarity with bicycles
☐ Bizarre elaborations	• Psychosis • Personality disorder • Trying to appear impaired
☐ Complains about task	• Depression, anger, irritability, oppositional
☐ Excessive slowness	• Depression • Compulsivity • Personality disorder • Neurological disorder