

2020 Botball Scoring Examples

- Basic – (R) bulldoze 4 red blocks off black tape onto Side – **4 pts** (1 * 4 blocks) – drive forward
- Basic – (L) push spacesuits off black line – **5 pts** (1 * 5 spacesuits) – drive forward
- Basic – (R) drop Meeples on side – **5 pts** (1 * 5 Meeples) – line follow to platform with fixed rake, turn left/right
- Basic – (R) bulldoze 8 red/green blocks off black tape – **8 pts** (1 * 8 blocks) – drive forward
- Basic – (L) drop water on side – **8 pts** (1 * 8 poms) – line follow to platform with fixed rake, turn left/right
- Intermediate – (R) pick up 3 poms and place in mineral processor – **15 pts** (5 * 3 poms) – dead reckoning and basic servo
- Basic – (L) drop ramp – **20 pts** – drive then turn right
- Basic – (R) bulldoze 4 red blocks in Material Processor – **20 pts** (1 * 4 blocks * 5 sorted) – drive forward
- Intermediate – (R) pick up 1 pom and place in mineral processor – **25 pts** (5 * 1 pom * 5 sorted) – dead reckoning and intermediate servo
- Basic – (L) knock over 3 red & 3 green 2" cubes – **30 pts** (5 * 6 blocks) – drive forward
- Advanced – (*) make 1 stack – **30 pts** (15 * 2 blocks) – grab larger block and smaller block, advanced servo (3 DoF), intermediate navigation
- Intermediate – (R) pick up 3 random poms, place in mineral processor, move classifier – **35 pts** (25 * 1 matching pom + 5 * 2 other poms) – dead reckoning and intermediate servo
- Intermediate – (L) drop ramp, go up ramp – **40 pts** (20/ramp down + 20/bot on ramp) – dead reckoning
- Intermediate – (L) put coupler on ramp – **50 pts** (20/ramp down + 30/coupler on ramp) – grab coupler with claw (servo work)
- Basic – (R) rake 4 red 1" blocks back into start box – **60 pts** (15 * 4 blocks) – drive forward, drop rake, backup
- Intermediate – (L) drop ramp, go to platform – **80 pts** (20/ramp down, 60/bot on platform) – advanced dead reckoning
- Basic – (L) push mine cart and hold – **100 pts** – drive forward (only works for seeding)

Basic – (R) bulldoze 4 red 1” blocks into Material Processor, set Classifier – **100 pts** (1 * 4 blocks * 5 sorted * 5 Matched) – drive forward and servo to move Classifier

Intermediate – (L) pull mine cart and hold – **100 pts** – drive forward, hook support, drive back

Expert – (R) pick up 1 red pom from each cart and place in mineral processor – **100 pts** (5 * 4 poms * 5 sorted) – dead reckoning and advanced servo plus camera

Intermediate – (R) rake 8 red/grn 1” blocks into start box – **120 pts** (15 * 8 blocks) – drive forward, drop rake to push red cubes, drive forward, raise rake to grab all cubes, backup

Advanced – (*) make 2 stacks – **120 pts** (15 * 4 blocks * 2 stacks) – grab 2 yellow blocks and 2 small blocks, advanced servo (3 DoF), intermediate navigation

Advanced – (R) pick up 1 pom and place in mineral processor, change classifier – **125 pts** (25 * 1 pom * 5 sorted) – dead reckoning and advanced servo plus camera

Intermediate – (L) drop ramp, put water into coupler – **140 pts** (20/ramp down, 8 * 15/water in coupler) – grab coupler, line follow, sweep poms

Advanced – (R) grab BotGuy, drop on Side – **150 pts (plus 3x other Side pts)** – advanced navigation/camera use, big functional arm

Advanced – (L) go up ramp, grab Botguy, place on ramp/platform – **230 pts** (20/ramp down + 60/bot on platform + 150/BotGuy on platform) – advanced navigation plus use of 14” arm

Expert – (*) Put 12 sky blue poms on Platform – **240 pts** (20 * 12 poms) – expert navigation and effector design

Expert – (*) grab Meeples, put in either Start box – **250 pts** (50 * 5 Astronauts) – expert navigation and effector design

Advanced – (L) put water in coupler and move to Left Start box – **260 pts** (20/ramp down, 8 * 15/water in coupler, 2x/coupler in left start box) – advanced navigation, grab coupler, sweep poms off shelf

Advanced – (*) make 3 stacks in either Start box – **270 pts** (15 * 6 blocks * 3 stacks) – grab 3 larger blocks and 3 smaller blocks, advanced servo (3 DoF), intermediate navigation

Advanced – (L) put water in coupler and move to Left Start box – **280 pts** (20/ramp down, 8 * 15/water in coupler, 2x/coupler in left start box) – advanced navigation, grab coupler, sweep poms off shelf

Advanced – (R) grab orange ball, place on mountain – **300 pts** – advanced navigation/camera use, big functional arm

Advanced – (L) put water in coupler and move to Right Start box – **380 pts** (20/ramp down, 8 * 15/water in coupler, 3x/coupler in right start box) – advanced navigation, grab coupler, sweep poms off shelf

Advanced – (L) pull mine cart, slide right to block (repeat 3x) – **400 pts** – advanced navigation, advanced claw

Expert – (R) pick up 1 red pom from each cart and place in mineral processor, change classifier – **500 pts** (5 * 4 poms * 5 matched * 5 sorted) – dead reckoning and advanced servo plus camera

Expert – (*) grab 5 Meeples, put in Spacesuits, in either Start box – **750 pts** (150 * 5 Astronauts) – expert navigation and effector design

Expert – (*) Put 12 sky blue poms on Platform with Botguy on Side – **870 pts** (20 * 12 poms * 3 multiplier + 150/Botguy) – expert navigation and effector design

Advanced – (*) make 6 stacks in either Start box – **1,080 pts** (15 * 12 blocks * 6 stacks) – grab 6 larger blocks and 6 smaller blocks, advanced servo (3 DoF), intermediate navigation

Expert – (*) Pull 12 sky blue poms and fill coupler on Side – **1,200 pts** (100 * 12 poms) – expert navigation and effector design

Expert – (*) Build 5 Astronauts in either Start box, add three stacks – **2,520 pts** ([150 * 5 Astronauts + 15 * 6 blocks] * 3 stacks) – expert navigation and effector design

Expert – (*) Pull 12 sky blue poms, fill coupler, place in Material Processor – **4,800 pts** (100 * 12 poms * 4 black classifier) – expert navigation and effector design

Expert – (*) Build 5 Astronauts in either Start box, add six stacks – **5,580 pts** ([150 * 5 Astronauts + 15 * 12 blocks] * 6 stacks) – expert navigation and effector design