

INTERNATIONAL UNICYCLE TRIALS RULES

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1. DEFINITION OF UNICYCLE TRIALS COMPETITIONS

The object of unicycle trials is to ride over obstacles. A unicycle trials competition takes place on a "course" containing different obstacles called "sections". Each section is worth one point, and courses typically contain 15 – 40 or more sections.

Riders earn points by successfully riding ("cleaning") each section from start to finish. The objective is to earn as many points as possible by cleaning as many sections as possible.

At the end of a specified time period, the rider with the highest overall number of points (who has cleaned the most number of sections) is the winner.

2. THE COURSE

The competition takes place within a specified time period (2+ hours depending on the number of obstacles), on a collection of 15 to >40 independent, numbered sections of any length (typically 3 m to 20 m long). Sections may include narrow beams or logs, steep climbs, rocks, etc.

The average difficulty level of sections will vary between competitions depending on the ability level of the riders participating. In all competitions, section difficulty should be evenly represented at all levels from the most beginner to the most expert riders. See Appendix 1 for more information on setting sections.

At each section are posted instructions that identify the section number, its difficulty level, and a description of the section. Section boundaries are defined by flagging tape and/or instructions that designate a start line, section boundaries, and a finish line.

3. COMPETITION TIME DURATION

The minimum competition time duration is 2 hours. If there are more than 30 sections and there are a large number of competitors, 3+ hours is recommended. The time duration should be sufficient to allow each rider time to attempt each obstacle multiple times, if necessary.

All riders must stop riding at the end of the time limit. If a rider is mid-way through an attempt when the time limit is reached, they are allowed to finish that attempt.

The maximum amount of time allowed for each attempt on a section is two minutes. However, for extremely long sections the Event Director may increase this time limit as necessary.

4. COMPETITION CATEGORIES

Competitors are divided up into different categories for the purpose of awarding prizes. Rider categories at major meets should follow the International Unicycling Federation rules. Smaller meets should include beginner, sport, and expert classes, but may not contain all categories. Categories based on gender should be included if there are both male and female participants, with a minimum of 3 riders in a category.

5. SECTION RESTRICTIONS FOR COMPETITION CATEGORIES

Normally, all riders of all categories are free to attempt any sections they wish, in the entire course.

In cases where there is a wide range of rider ability, or there are space or time restrictions, the Event Director may allow the Expert and Pro classes to skip the sections that were set for beginner riders. If this is the case, the Event Director should clearly mark the sections that may be skipped.

There should not be any restriction on riders attempting more difficult sections. The only exception would be in cases where the Event Director decides that a section is too dangerous to be attempted by beginner or sport level riders.

6. SCORING POINTS

Each section is worth one point, and the objective is to score points by successfully riding ("cleaning") as many sections as possible within the specified time period.

6.1. Definition of "Cleaning"

Cleaning a section is defined as follows:

1. Riding into a section. This is defined as the moment a rider's front axle crosses over the start line.
2. Riding through the section without "dabbing". Dabbing is defined as follows:
 - Allowing any part of the rider's body to touch the ground or obstacle. If loose clothing brushes against the ground or obstacle but does not influence the rider's balance, then this is acceptable (does not constitute a dab).

- Allowing any part of the cycle except the tire, rim, spokes, crank arms, pedals, bottom bracket, bashguard or bearing housings to touch the ground.
 - Riding or hopping outside the boundaries of the defined section. The axle(s) of the cycle must be within the boundaries of the section at all times, even if the rider is in the air (e.g., a rider cannot hop over a section boundary that turns a corner, even if they land back inside the section).
 - Breaking the flagging tape or other markers that are delineating a section boundary. Touching or stretching the tape does not constitute a dab, as long as the axle(s) remain inside the section boundary.
 - Riding a section in any way that is not consistent with the instructions outlined for that problem.
3. Exiting the section. A rider exits a section when their axle(s) fully cross over the finish line, or are within a defined finish area (such as a taped circle on top of a boulder). There is no requirement to exit in control. If a rider falls across the defined finish line but manages to exit without dabbing, they have cleaned the section.

6.2 Exceptions and special notes

- When hooking a pedal on an obstacle, it is acceptable for a rider's heel and/or toe to initially contact the ground, as long as most of the rider's foot is still on the pedal. However, after a rider is established in position, weighting the heel or toe on the ground constitutes a dab.
- It is acceptable for a rider's body to be entirely on one side of the centerline of the cycle.

Riders may attempt any problem multiple times until they succeed or decide to abandon the section. However, it is not possible to earn additional points by cleaning a section more than once, and no points are awarded if the rider does not clean the entire section.

If there is a lineup for a section, the rider must go to the end of the line after each attempt. Near the end of the competition time period, priority must be given to riders attempting a section for the first time.

7. OBSERVERS

Observers are responsible for judging whether a rider has successfully cleaned a section. There are several possible ways for an Event Director to organize Observers at an event:

- One Observer can be assigned to judge at each section. This is the best option but is normally not possible because there are normally more sections than Observers.

- Each Observer can be assigned to judge several sections in the nearby vicinity. In this case, it is the responsibility of the rider to ensure that an Observer is watching when they attempt a section.
- Riders can be split into groups, and one Observer is assigned to each group. This Observer would then follow the group around as they go from section to section.
- At small events, there may not be a need for Observers. Riders waiting to attempt a section may serve as Observers for the rider who is currently attempting the section. This is termed "self-judging", and it is up to the riders to ensure that scores are honestly recorded. This is the most common method for smaller competitions.

8. KEEPING SCORE

8.1 Method 1

Method 1 is mandatory for all major competitions and is the recommended method for all other competitions.

Each rider is issued a scorecard (see example) at the beginning of the competition, and must give their card to an Observer prior to attempting a section. If the competition is self-judged, the rider attempting the section gives their card to another rider who must observe them attempt the section. If they clean the section, the observer indicates that they have completed the section by initialing or punching the box corresponding to that section. This allows the rider to keep track of which sections they have already cleaned.

At the end of the competition, riders hand in their cards to the Event Director or to a designated person for tallying of scores. For the last hour of competition, the Observer should also record the time completed for each section (see Section 13, Tiebreaking).

Example scorecard:

Rider Name:		Category:
Section Completed	Section Completed	Section Completed
1	16	31
2	17	32
3	18	33
4	19	34
5	20	35
6	21	36
7	22	37
8	23	38
9	24	39
10	25	40
11	26	41
12	27	42
13	28	43
14	29	44

15	30	45
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8.2 Method 2

This method is intended for small events, and is not appropriate for larger events. Major events such as UNICON or national meets must not use this system of scoring.

In this method, one or two observers keep track of scores for numbered sections on a computer or paper spreadsheet such as this:

		Section															
Rider:	Category	1	2	3	4	5	7	8	9	10	11	12	13	14	15	16	17
Jane Smith:	Expert																
John Anderson	Sport																
Etc	Pro																

After cleaning a section, the rider must return to the Observer and tell them which section they cleaned.

9. PARTICIPATION BY THE COURSE SETTER(S)

Due to the grassroots nature of many events, the course setter(s) are allowed to compete. Although the course setter may initially be more familiar with course sections than the other riders, this should not result in an advantage because everyone is allowed multiple attempts to complete sections. However, if the Course Setter(s) chooses to also compete, they must conform to Rider Responsibility No. 6, and refrain from riding on the course prior to the competition, including while they are designing and building the sections.

10. SAFETY

All riders must wear appropriate safety gear, such as helmets, shin and knee protection and gloves or wristguards. Dangerous sections must not be constructed, and in particular, there should be no dangerous objects to land on if a rider falls off a high object. Artificial sections should be constructed so that they do not collapse or fall over under normal riding conditions.

If an Observer or the Event Director feels that safety is compromised by a rider attempting a section that is beyond his/her ability, they may prohibit the rider from attempting that obstacle. In cases where a fall from an obstacle could be particularly dangerous, the Event Director may also permit attempts only by Expert and/or Pro class riders.

11. RIDER RESPONSIBILITIES

- a. The rider must know the rules.
- b. The rider must gauge their time. No allowance will be made for riders who spend too much time at one obstacle and cannot complete the course before the end of the competition time period.
- c. The rider is responsible for knowing where a section starts and ends, and which route he or she is supposed to take.
- d. If two or more sections overlap, it is recommended that only one rider at a time attempt any of the overlapping sections. If two or more riders are on overlapping sections at one time, the rider who started first has the right-of-way.
- e. The rider is responsible for his or her scorecard. If it becomes damaged, the rider can ask the Event Director for a new one. If it becomes lost, the rider will be issued a new card but their score will return to zero.
- f. No rider may attempt any obstacle prior to the start of the competition. Ideally there should always be a separate practice area set up outside the competition area, for warming up prior to competing.
- g. Intentional modification of a section by riders or spectators is prohibited. Note that kicking objects to test stability does not constitute intentional modification if an object moves. If a section is unintentionally modified or broken by a rider, they should inform the Event Director or Course Setter who will return the obstacle to its original form if possible.
- h. The rider is responsible for ensuring that their time of completion is recorded for each section, if required.

12. PROTESTS AND DISPUTE SETTLEMENT

A protest can be lodged by anyone against an Observer's ruling. Protests typically arise when a bystander (another rider, or a spectator) observes a rider make an infraction that is not recorded by the Observer, or when an Observer gives the wrong penalty.

Protests must be lodged with the event director within fifteen minutes of the official results being posted. Protests must be in writing, and must note the rider, and section number and a description of the protest.

For small-scale events, the Event Director can act as the sole jury member. For larger events there should be a Jury consisting of at least three members, and they should be appointed in advance of the event. The Jury should be composed of the Event Director, the head Observer or Event Commissar if applicable, and a riders' representative. If there is no head Observer, the Event Director can appoint any person with experience in trials. Care should be taken to avoid conflict of interest and, in the event that a protest involves someone close to a Jury member, that person should be replaced for evaluation of the protest in question.

The jury will base its ruling on the input from the relevant parties, including the rider, the Observer, and the person who lodged the protest. In the evaluation of protests, the benefit of the doubt must go to the Observer. The Jury is not obliged to overrule the Observer based on testimony from witnesses. Only if all parties present at the incident agree on the facts, and the Observer accepts that he or she made an error in assigning penalties, can an Observer's decision be overturned.

13. Tie breaking

A tie occurs when the competition finishes and one or more riders have completed the same number of sections.

To break ties, the Course Setter should collaborate with the tied riders to create a new, "tiebreaker section" at an appropriate level of difficulty. This section should be relatively long and may consist of several existing sections joined together, or an entirely new section. The section should contain obstacles of increasing difficulty towards the exit location.

Each tied rider attempts this section and the winner is the person who rides the furthest without dabbing. Only one attempt is allowed.

The furthest location of a rider is defined by the part of the cycle that is touching the ground (the crank, pedal, or tire), prior to dabbing. There is no requirement for the rider to be in control. For example, if a rider lands a drop onto their tire,

but immediately dabs, their furthest point would be the location where their tire last touched prior to dabbing.

If more than one rider cleans the tiebreaker section, another tiebreaker should be conducted with a more difficult section.

14. UNICYCLE DESIGN RESTRICTIONS

Any unicycle may be used. There is no restriction on changing unicycles during the competition.

APPENDIX 1. GUIDELINES FOR COURSE SETTERS

1.1 Numbering and Describing Sections

Course setters should ensure that they have the following material for flagging and describing sections: flagging tape, duct tape, spray-paint, a staple gun, paper or cardboard, a felt marker, and large size Ziploc bags. Laminated cards with large letters A, B, C, etc. or 1, 2, 3, etc. are also very useful for labeling obstacles for description purposes.

Each section must be clearly numbered and designated with written instructions and/or flagging tape, and have clearly marked start and finish locations. Be especially careful to clearly define the finish so it is clear when a rider has cleaned a section.

Section instructions should include the section number and a description of the section. Assigning difficulty ratings to sections is not required. However, it is recommended that difficulty ratings be assigned to sections and listed on the rider scorecards, because it allows riders to quickly determine which obstacles they wish to attempt. See Appendix 2 for guidelines on assigning difficulty ratings.

Section instructions should include the following information:

- Start: Description of the start location
- Section: Description of the section and section boundaries
- Finish: Description of the finish location
- Sketch of the section (optional)

Using sketches is strongly recommended for international events where all riders do not speak the same language. In some cases it can replace written instructions.

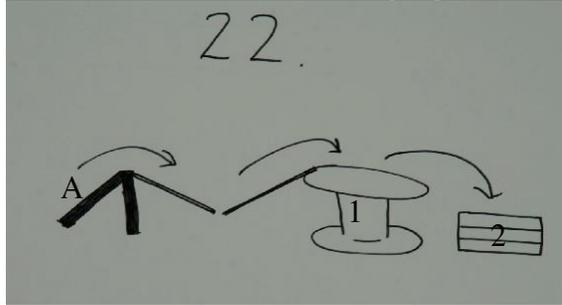
Example Instructions and Sketch:

Section 23. Difficulty: U3

Start: between the yellow tape, onto Beam A

Section: Ride from Beam A onto Spool #1, then to Box 2.

Finish: Ride off Box 2, staying between the 2 lines of flagging tape



To make it easier to describe sections, label major obstacles with numbers and/or letters. These should be clearly visible at a distance. Plastic laminated cards with letters or numbers are good because they can be re-used at other competitions.

One good strategy is to label all boxes with numbers, and all beams with letters. This makes it much easier to include section descriptions such as “ride from Beam A to Box 6, without touching the ground.”

Section instructions should not require or prohibit a rider from using certain techniques to complete a section. For example, the instructions must not prohibit the use of pedal grabs or bash guards in order to increase the challenge.

1.2 Section Difficulty

The range in difficulty of sections should correspond to the range in ability levels of the participants. The easiest sections should be cleanable by all participants after one or two attempts, and the harder sections should require multiple attempts by the best riders.

It is recommended to include one or two sections that are so difficult that they may only be cleaned by one rider, or not at all. This will help prevent ties for first place, and may also help to increase the technical standards of the sport if a rider succeeds in doing something that has never been done before.

1.3 Course Planning: Location and Materials

It is most important to make maximum use of available resources. Prior planning and proper site selection are essential. Expect to take at least one day to set a course for a major competition, plus time to assemble the raw building materials.

If possible, select a course location with an abundance of natural obstacles, or features that can be incorporated into human-constructed obstacles. It cannot be overstated that it is much easier to make use of what is already there, rather than constructing new obstacles.

Sections may be set on natural features such as bedrock, boulders, logs, and hill slopes, and/or constructed from stacked pallets, railings, truck tires, junkyard cars, obstacles constructed from lumber, or any other material at hand. Often it is good to combine natural features with human-constructed obstacles.

It is highly recommended to also build a basic practice area to be set up outside of the competition area. This can consist of a small number of random obstacles, and is important for warm-up and to reduce the temptation to ride on the course prior to the event.

Make sure that there is plenty of extra building material (tools, screws, and raw materials) on hand to repair sections damaged during the event.

1.4 Course Design

Sections should differ substantially from each other and test a variety of hopping and rolling techniques. Often, it is a good idea to mentally make a list of the different techniques in trials, and design sections that test each of them separately or in combination.

The course layout is controlled mainly by the available resources. If there are abundant natural obstacles, design sections around the most obvious natural features.

For either natural or artificial sections, a good way to maximize resources is to first construct several major structures that can be used as centerpieces, or hubs, and then design sections that center around these hubs. For example, a car, spool, or large boulder could serve as a hub, surrounded by smaller structures that lead onto and over the hub in different ways.

Building centralized hubs rather than independent sections allows for high concentrations of sections on less building material. Unlike conventional bike trials, it is not a problem to design overlapping sections, although sometimes it may cause delays as riders wait for their turn. Usually a combination of hubs and independent sections is best.

It is extremely important to design sections that are durable enough that they do not break or change during the competition time period.

Overall, a course should not favor left or right handed riders, or riders with right- or left-foot-forward hopping stances. For example, the Course Setter should include sections requiring hops to both the right and to the left.

It is best to design sections that provide challenge without undue risk. Typically the best-designed sections include moves that test balance and precision, rather than moves that are difficult only because they are big. For example, rather than constructing a big, basic drop or gap between easy terrain, increase the difficulty of the takeoff or landing areas by making them smaller or off-angle. It is strongly recommended to avoid building any drops to hard, flat ground that are greater than 1.5m height.

There is no requirement that riders exit a section while in full control of their cycle. Consequently, a well-designed section should force riders to be in control in order to finish--it should not be common for riders to fall across the finish line. The easiest way to do this is to include at least 2 metres of easy ground between the last hard obstacle and the finish line.

A photo album of previously constructed sections is located at www.krishholm.com/sections.

1.5 Time and Space-Saving Strategies

If building material is extremely limited and there are very few participants, an alternative competitive strategy is to create an elimination round, instead of setting an entire course.

A small number of sections is set (as little as 1 section at a time), and riders attempt all sections. Any rider who cannot clean an obstacle after multiple attempts is eliminated. Then a second set of section(s) is set, and the process repeated until only one rider can clean the section(s). This option works with minimal resources but should be regarded as a last resort.

APPENDIX 2. GUIDELINES FOR ASSIGNING DIFFICULTY RATINGS TO FREETRIALS SECTIONS

Assigning difficulty ratings to sections is optional. However, it is helpful in that it helps riders quickly evaluate which sections they want to attempt, and it provides a way for riders to measure their skill level.

Two methods for rating section difficulty are described below. The first method is simple and will suffice for most bike and/or unicycle freetrials events. The second method (the U-system) is specific to unicycle trials and is recommended for major unicycle trials events.

The most important responsibility when assigning difficulty ratings is to be consistent. For this reason it is best to assign difficulty ratings after all sections have been built. Course setters should also try not to let their own strengths and limitations at different techniques bias their judgment of score values. This is especially important for rating sections that have similar difficulty levels but which require different skills (e.g., hopping, riding narrow beams, pedal grabs, etc.)

These difficulty ratings do not rate the level of danger. For example, Course Setters should not give a narrow beam a more difficult rating if it is high off the ground.

Simplified Method to Assign Difficulty Ratings

The following table is a semi-relative rating system describing 4 difficulty levels from beginner to expert/pro. It uses the same difficulty symbols as ski areas. When rating difficulty levels of sections, the section setter(s) should finish all the sections and rate them afterwards, so as to get the best sense for relative difficulty levels between sections. All symbols do not necessarily have to be used for every course (i.e. the easiest or hardest sections do not necessarily need to be green circle or double black diamond). For unicyclists, the reference U-rating is given.

Simplified Difficulty Ratings

Level	Difficulty	U-levels (unicycle only)
 Green Circle	Beginner	U0-U1
 Blue Square	Intermediate	U2-U3
 Black Diamond	Expert	U4-U6
 Double Black Diamond	Pro	U7-U8

2.2 The U-system for rating the difficulty of unicycle trials obstacles and sections

This section is specific to unicycle trials.

The U-system is an open-ended rating system that describes the difficulty of riding trials obstacles, and is based on the difficulty rating systems used for rock climbing. It can be applied to trials competitions, recreational trials riding, or very short technical sections of trail when mountain unicycling.

The U-system is different than the "Artistic Skill Levels" defined for artistic unicycling (see the Artistic Skill levels at www.unicycling.org) because it does not consider riding techniques. Instead, it rates the difficulty of an obstacle itself, irrespective of the technique used to ride it.

Two tables are provided below. Table 1 gives basic dimensions for obstacles and techniques at each U-level, and the section gives examples of familiar everyday obstacles at each level. By necessity, each obstacle is the simplest possible to describe. Also, even though the U-system rates obstacle difficulty, not the difficulty of moves, example techniques are provided to help give the rider a sense for the difficulty of these moves at different levels. Table 2 is a simple description of example types of challenges at each U-level.

Obstacles in Table 1 are described where:

- All hops and drops are between uniform, flat surfaces. The table measurement is the height.
- All gaps are between elevated, uniform, horizontal surfaces with vertical sides. The table measurement is the width between takeoff and landing surfaces.
- All balance beams are level, straight, and at least 3m long. The measurement is the beam width.
- "+variation" means some addition of non-uniform terrain to increase difficulty. Any non-uniform terrain will typically increase the difficulty.
- N/A means that the technique would not typically be used.
- With experience, a rider will get a "feeling" for the difficulty of other trials problems by comparing them to the reference obstacles in these tables. In this way, an unlimited number of problems can be graded for difficulty.

Table 1. Dimensions of obstacles and techniques for different U-levels

Non-metric measurements (inches)

U-Level	Hop (static, seat-in)	Hop (static, seat-out)	Hop (rolling)	Gap (static, seat in)	Gap (static, seat out)	Gap (rolling)	Drop (static, seat in)	Drop (static, seat out)	Drop (rolling, seat in)	Drop (rolling, seat out)	Pedal Grab or Crank Grab	Riding round beam (widths)	Riding square beam (widths)
0	6	n/a	4	8	8	8	12	12	8	8	n/a	n/a	8
1	10	n/a	6	12	12	12	18	18	12	12	n/a	n/a	7
2	14	14	10	16	16	16	24	24	18	18	12	n/a	6
3	18	18	18	26	26	24	36	36	24	24	24	n/a	4
4	n/a	22	22	38	38	38	48	48	36	36	30	8	2
5	n/a	26	26	50	50	50	60	60	48	48	36	6	<2 + variation
6	n/a	30	30	62	62	64	72	72	60	60	>36+ variation	3	<2 + variation
7	n/a	33	33	n/a	64	78	>72+ variation	84	72	72	>36+ variation	2	<2 + variation
8	n/a	36	36	n/a	78	84	>72+ variation	96	>72 + variation	>72 + variation	>36+ variation	<2 + variation	<2 + variation

Metric measurements (cm)

U-Level	Hop (static, seat-in)	Hop (static, seat-out)	Hop (rolling)	Gap (static, seat in)	Gap (static, seat out)	Gap (rolling)	Drop (static, seat in)	Drop (static, seat out)	Drop (rolling, seat in)	Drop (rolling, seat out)	Pedal Grab or Crank Grab	Riding round beam (widths)	Riding square beam (widths)
0	15	n/a	10	20	20	20	30	30	20	20	n/a	n/a	20
1	25	n/a	15	30	30	30	45	45	30	30	n/a	n/a	17.5
2	35	35	25	40	40	40	60	60	45	45	30	n/a	15
3	45	45	45	65	65	60	90	90	60	60	60	n/a	10
4	n/a	55	55	95	95	95	120	120	90	90	75	20	5
5	n/a	65	65	125	125	125	150	150	120	120	90	15	<5 + variation
6	n/a	75	75	155	155	160	180	180	150	150	>90+ variation	7.5	<5 + variation
7	n/a	82.5	82.5	n/a	160	195	>180+ variation	210	180	180	>90+ variation	5	<5 + variation
8	n/a	90	90	n/a	195	210	>180+ variation	240	>180 + variation	>180 + variation	>90+ variation	<5 + variation	<5 + variation

Table 2. This is a qualitative table that describes simple examples of typical challenges at each U-Rating. The examples are mostly urban terrain because it is too complicated to describe natural obstacles.

U-Rating	Example obstacles for each difficulty rating.
U0	<ul style="list-style-type: none"> Moderately easy terrain encountered during cross-country mountain unicycling that is possible to ride purely by rolling.
U1	<ul style="list-style-type: none"> Hopping up or down a set of basic urban stairs Riding along the edge of concrete street curbs bordered by grass.
U2	<ul style="list-style-type: none"> Dropping from a bench seat to flat ground, hopping through a rooty section of gentle trail, riding along flat-topped parking lot dividers Riding along a level 4x4 beam
U3	<ul style="list-style-type: none"> Hopping over a picnic table via the seats Hopping from the front hood of a junk car onto the roof Riding along the wide edge of a level 2 m long 2x4 beam Riding along a railroad track
U4	<ul style="list-style-type: none"> Going directly to the top of a picnic table from the ground. Riding along a 4 cm wide beam
U5	<ul style="list-style-type: none"> Riding over a junk car, from the ground to the front hood, roof, back hood, and back to the ground. Pedal grabbing up the side of a 90 cm diameter round log.
U6	<ul style="list-style-type: none"> Pedal grabs up to a good square ledge part way up the side of a boulder, going to rubber, and then hopping directly to the top of the boulder. Sidehop to rubber on the back railing of a park bench-style chair, then ride. Gapping horizontally across to a round railing, then to a second one about 1m away, and then to the ground. Pedal grabbing a fence, and then over the fence to the ground on the other side. Doing a 180° turn on a railroad track.
U7	<ul style="list-style-type: none"> Pedal grab, and then go to rubber and ride 5 m on a 3 cm wide square railing. Mount and then ride along a 3 cm round horizontal railing for 5 m 60 cm sidehop to rubber on a 3 cm wide square railing, then ride 5 m Multiple gaps perpendicular to four 3 cm wide railings spaced 1m apart. Riding along one 3 cm round railing, then gapping to another that is less than 50 cm away.
U8	<ul style="list-style-type: none"> 70 cm hop to rubber, then ride along a 3 cm wide round railing Riding uphill or around curves on 3 cm wide round railings Multiple hops across 3 or more well-spaced round railings. Pedal grab a 3cm wide round railing, then go to rubber and ride. 90 cm high pedal grab, then to rubber, on a 10 cm diameter vertical pole. Ride along a railroad track, gap to the other track, and keep riding
U9	Harder than U8. The future.